A Division of Systems, Inc.

POWERAMP®

Premium Loading Dock Systems

TPR™

Truck Restraint

Owner's/User's Manual

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Recognize Safety Information

Safety-Alert Symbol

The Safety-Alert Symbol identifies NOTICE safety messages on equipment, safety signs, in manuals, or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

DANGER

The use of the word DANGER signifies the presence of an extreme hazard or unsafe practice which will most likely result in severe injury or death.

WARNING

The use of the word WARNING signifies the presence of a serious hazard or unsafe practice which may result in serious injury or death.

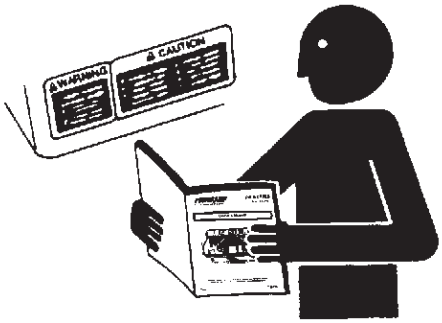
CAUTION

The use of the word CAUTION signifies possible hazard or unsafe practice which could result in personal injury.

NOTICE

The use of the word NOTICE is to draw attention to a procedure that needs to be followed to prevent machine damage.

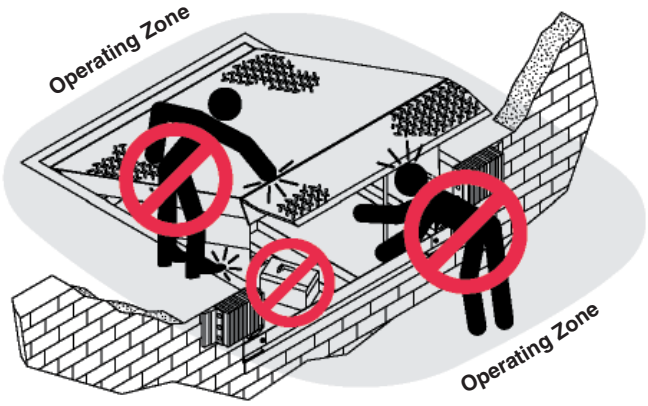
General Operational Safety Precautions



Read and understand the Owner's/User's Manual and become thoroughly familiar with the equipment and its controls before operating the dock leveler.

Never operate a dock leveler while a safety device or guard is removed or disconnected.

Never remove DANGER, WARNING, or CAUTION signs or Decal's on the equipment unless replacing them.



Do not start the equipment until all unauthorized personnel in the area have been warned and have moved outside the operating zone.

Remove any tools or foreign objects from the operating zone before starting.

Keep the operating zone free of obstacles that could cause a person to trip or fall.

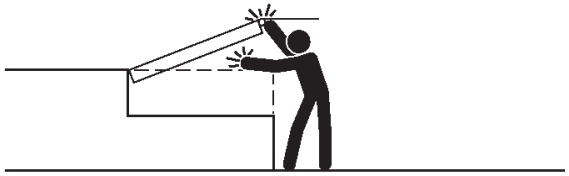
Operational Safety Precautions

Learn the safe way to operate this equipment. Read and understand the manufacturer's instructions. If you have any questions, ask your supervisor.

DANGER

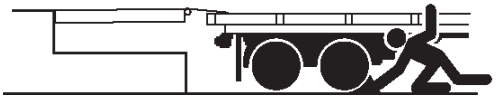
Stay clear of dock leveling device when transport vehicle is entering or leaving area.

Do not move or use the dock leveling device if anyone is under or in front of it.

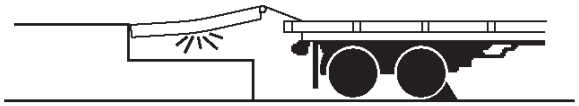


Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.

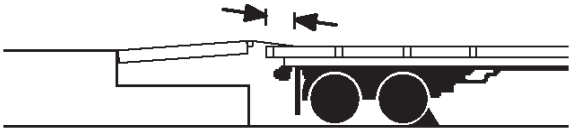
WARNING



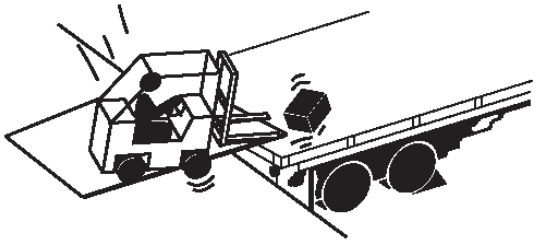
Chock/restrain all transport vehicles. Never remove the wheel chocks until loading or unloading is finished and transport vehicles driver has been given permission to drive away.



Do not use a broken or damaged dock leveling device. Make sure proper service and maintenance procedures have been performed before using.

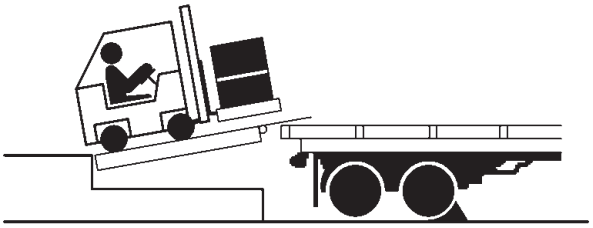


Make sure lip overlaps onto transport vehicles bed at least 4 in. (102 mm).

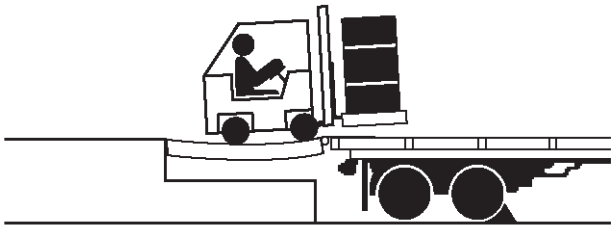


Keep a safe distance from both side edges.

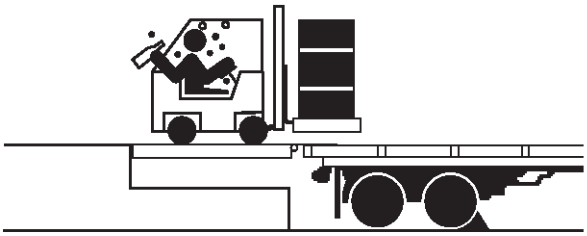
WARNING



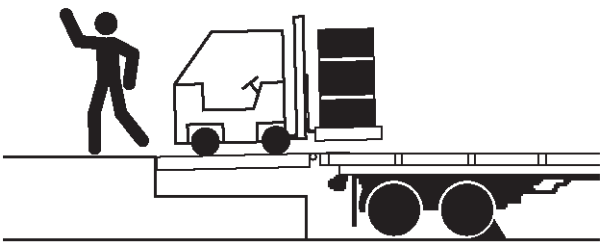
Do not use dock leveling device if transports vehicles bed is too high or too low.



Do not overload the dock leveling device.



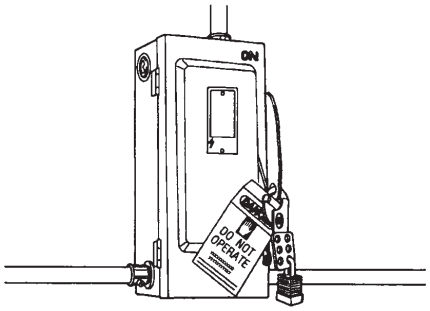
Do not operate any equipment while under the influence of alcohol or drugs.



Do not leave equipment or material unattended on dock leveling device.

Maintenance Safety Precautions

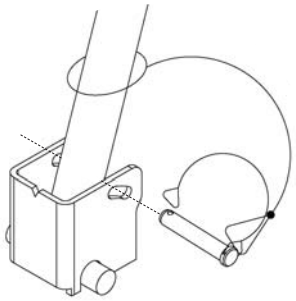
WARNING



Hydraulic and electrical power must be OFF when servicing the equipment. For maximum protection, use an OSHA approved locking device to lock out all power sources. Only the person servicing the equipment should have the key to unlock the device.

CAUTION

Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the unit before maintenance is complete.



The maintenance prop must be in the upright “service” position when working under the dock leveler. For maximum protection, use an OSHA approved locking device to lock the maintenance prop in the service position. Only the person servicing the equipment should have the key to unlock the device.

WARNING

ALWAYS disconnect electrical power source and ground wire before welding on dock leveler.

DO NOT ground welding equipment to any hydraulic or electrical components of the dock leveler. Always ground to the dock leveler frame.

Failure to follow these instructions may result in damage to dock leveler and/or serious personal injury or death.

WARNING

DO NOT grind or weld if hydraulic fluid or other flammable liquid is present on the surface to be ground or welded

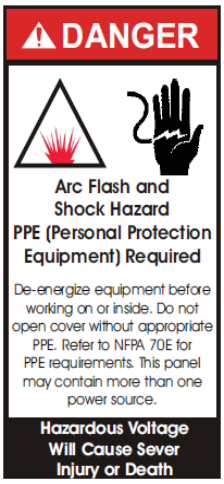
DO NOT grind or weld if uncontained hydraulic fluid or other flammable liquid is present. Stray sparks can ignite spills or leaks near the work area. Always clean up the oil leaks and spills before proceeding with grinding or welding.

Always keep a fire extinguisher of the proper type nearby when grinding or welding.

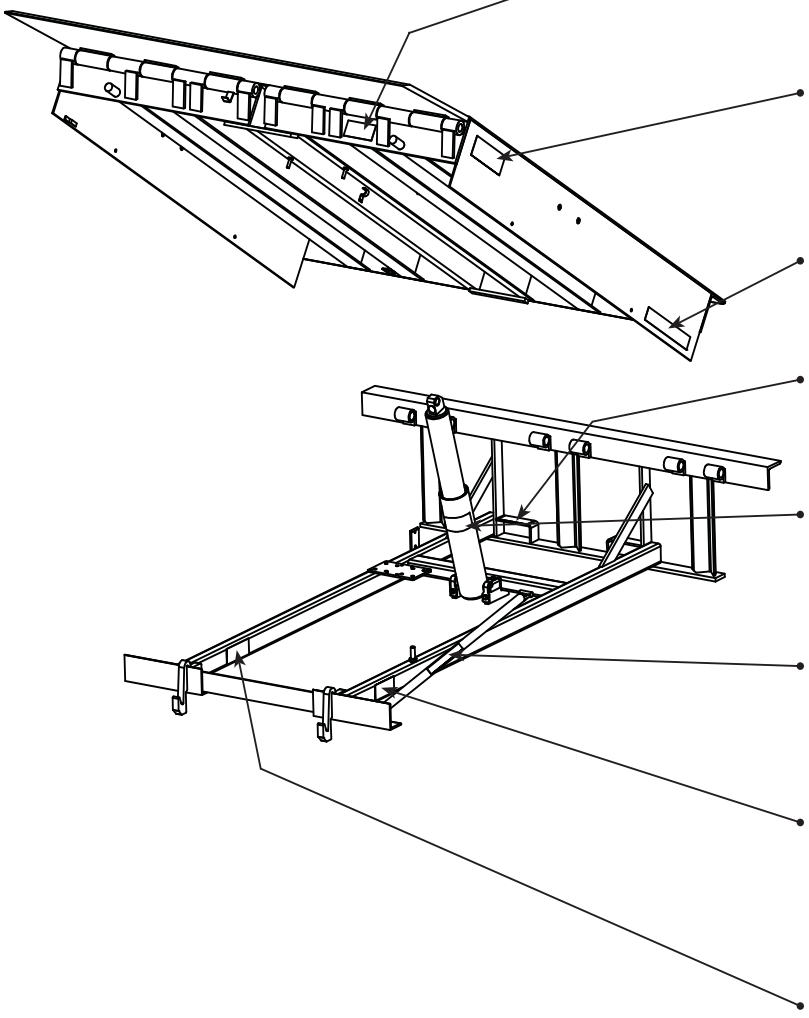
Failure to follow these instructions may result in serious personal injury or death.

WARNING

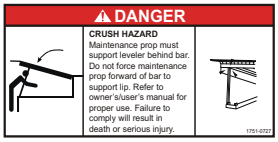
ALWAYS stand clear of dock leveler lip when working in front of the dock leveler. Failure to do this may result in serious personal injury or death.


DANGER
Arc Flash and Shock Hazard
PPE (Personal Protection Equipment) Required
De-energize equipment before working on or inside. Do not open cover without appropriate PPE. Refer to NFPA 70E for PPE requirements. This panel may contain more than one power source.
Hazardous Voltage Will Cause Sever Injury or Death

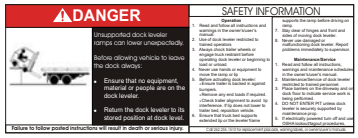
Every 90 days (quarterly) inspect all safety labels and tags to ensure they are on the dock leveler and are easily legible. If any are missing or require replacement, please call 1-800-643-5424 for replacements.



1751-0727


DANGER
CRUSH HAZARD
Maintenance prop must support leveler behind bar. Do not force maintenance prop forward of bar to support lip. Refer to owner's/user's manual for proper use. Failure to comply will result in death or serious injury.
1751-0727

1751-0730 (x2)


DANGER
Unsupported dock leveler ramps can lower unexpectedly.
Before allowing vehicle to leave the dock always:
Ensure that no equipment, material or people are on the dock leveler.
Return the dock leveler to its stored position at dock level.
Failure to follow posted instructions will result in death or serious injury.
SAFETY INFORMATION

(decal placed in same position on both sides)

1751-0329 (x2)

(decal placed in same position on both sides)

1751-0330 (x2)

(decal placed in same position on both sides)

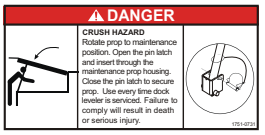
1751-0138

DANGER
CRUSH HAZARD
DO NOT REMOVE hydraulic cylinder until leveler is safely supported by maintenance prop. Refer to owner's/user's manual for proper maintenance procedure. Failure to comply will result in death or serious injury.

1751-0729

DANGER
CRUSH HAZARD
Do not work under dock leveler unless this maintenance prop has been secured in the upright position. See owner's/user's manual for proper procedures. Failure to comply will result in death or serious injury.
1751-0729

1751-0731


DANGER
CRUSH HAZARD
Rotate prop to maintenance position. Open the pin latch and insert through the maintenance prop housing. Close the pin latch to secure prop. Use every time dock leveler is serviced. Failure to comply will result in death or serious injury.
1751-0731

1751-0726

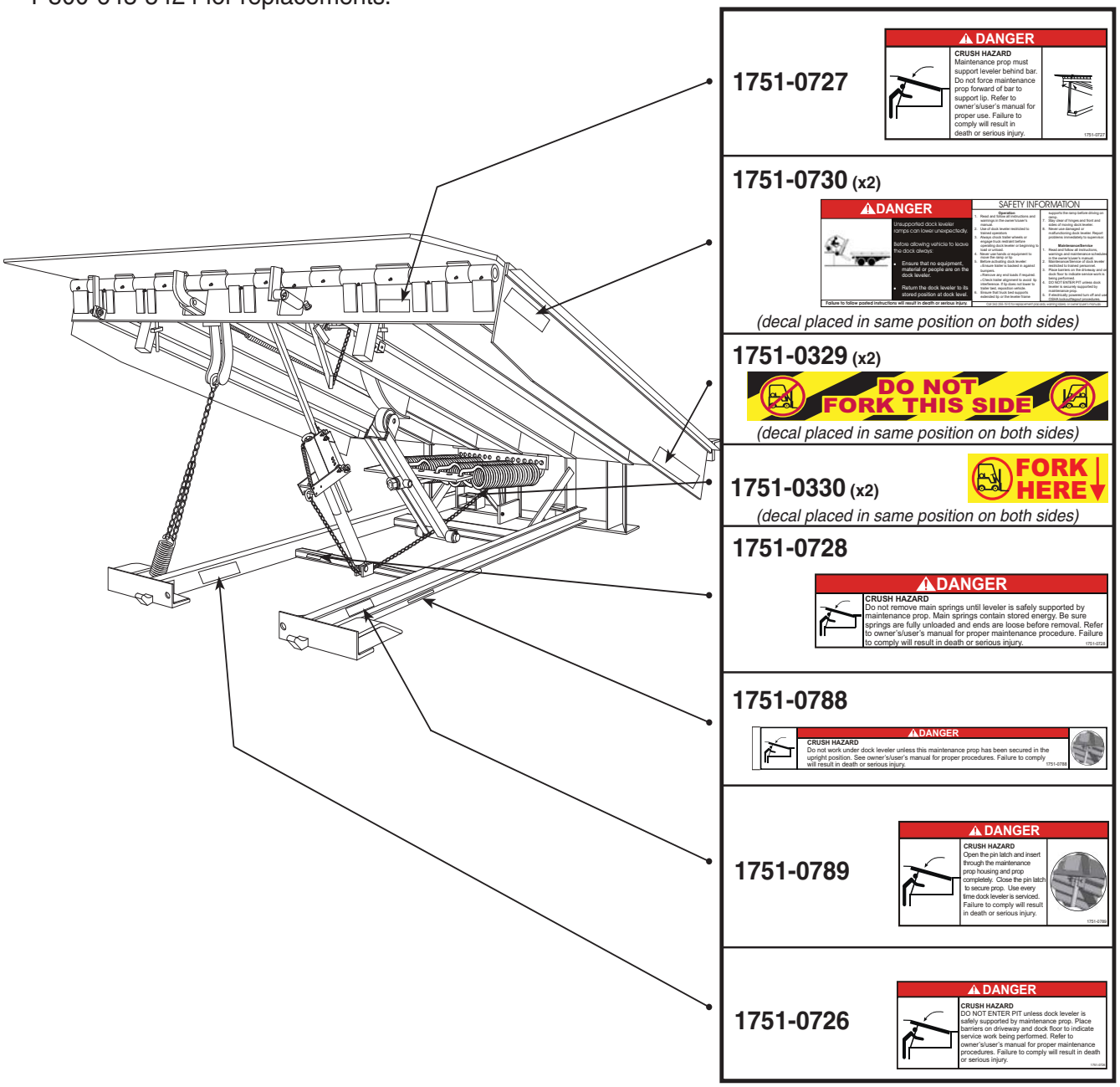
DANGER
CRUSH HAZARD
DO NOT ENTER PIT unless dock leveler is safely supported by maintenance prop. Place barriers on driveway and dock floor to indicate service work being performed. Refer to owner's/user's manual for proper maintenance procedures. Failure to comply will result in death or serious injury.
1751-0726

Note

This is a example of dock leveler safety decals. See manual for your specific model for correct safety decal sheet or consulate Tech Services

Dock Leveler Safety Decal's

Every 90 days (quarterly) inspect all safety labels and tags to ensure they are on the dock leveler and are easily legible. If any are missing or require replacement, please call 1-800-643-5424 for replacements.


1751-0727
DANGER
CRUSH HAZARD
Maintenance prop must support leveler behind bar. Do not force maintenance prop forward of bar to support lip. Refer to owner's/user's manual for proper use. Failure to comply will result in death or serious injury.
1751-0730 (x2)
DANGER
Unsupported dock leveler ramps can lower unexpectedly.
Before allowing vehicles to leave the dock always:
Ensure that no equipment, material or people are on the dock leveler
Return the dock leveler to its stored position at dock level.
Failure to follow posted instructions will result in death or serious injury
SAFETY INFORMATION
(decal placed in same position on both sides)
1751-0329 (x2)
DO NOT FORK THIS SIDE
(decal placed in same position on both sides)
1751-0330 (x2)
FORK HERE
(decal placed in same position on both sides)
1751-0728
DANGER
CRUSH HAZARD
Do not remove main springs until leveler is safely supported by maintenance prop. Main springs contain stored energy. Be sure springs are fully unloaded and ends are loose before removal. Refer to owner's/user's manual for proper maintenance procedure. Failure to comply will result in death or serious injury.
1751-0788
DANGER
CRUSH HAZARD
Do not work under dock leveler unless this maintenance prop has been secured in the upright position. See owner's/user's manual for proper procedures. Failure to comply will result in death or serious injury.
1751-0789
DANGER
CRUSH HAZARD
Open the pin latch and insert through the maintenance prop housing and prop completely. Close the pin latch to secure prop. Use every time dock leveler is serviced. Failure to comply will result in death or serious injury.
1751-0726
DANGER
CRUSH HAZARD
DO NOT ENTER PIT unless dock leveler is safely supported by maintenance prop. Place barriers on driveway and dock floor to indicate service work being performed. Refer to owner's/user's manual for proper maintenance procedures. Failure to comply will result in death or serious injury.

Note
This is a example of dock leveler safety decals. See manual for your specific model for correct safety decal sheet or consulate Tech Services

OWNER'S/USER'S RESPONSIBILITIES

1. The owner/ user should recognize the inherent dangers of the interface between the loading dock and the transportation vehicle. The owner/ user should, therefore, train and instruct all operators in the safe operation and use of the loading dock equipment in accordance with manufacturer's recommendations and industry standards. Effective operator training should also focus on the owner's/user's company policies and operating conditions. Maintaining, updating and re training all operators on safe working habits and operation of the equipment, regardless of previous experience, should be done on a regular basis and should include an understanding and familiarity with all functions of the equipment. Owner's/user's shall actively maintain, update and retrain all operators on safe working habits and operations of the equipment.

2. The manufacturer shall provide to the initial purchaser all necessary information regarding Safety Information, Operation, Installation and Safety Precautions, Recommended Initial and Periodic Inspections Procedures, Planned Maintenance Schedule, Product Specifications, Troubleshooting Guide, Parts Break Down, Warranty Information, and Manufacturers Contact Information, as well as tables to identify the grade(slope) for all variations of length or configuration of the dock leveling device and information identifying the maximum uncontrolled drop encountered when sudden removal of support while in the working range of the equipment.

3. It is recommended that when the transportation vehicle is positioned correctly in the dock opening and in contact with both bumpers, there shall be a minimum of 4.00 inches (100mm) overlap of the leveling device and the transportation vehicle at all times during the loading and unloading process.

4. The Owner/User must review all name plates, placards, decals, instructions and posted warnings and place the same in view of the operator or maintenance personnel for whom such warnings are intended for. Contact manufacturer for any replacements.

5. Manufacturer's recommended periodic maintenance and inspection procedures in effect at the date of shipment shall be followed at all times. Written documentation of maintenance, replacement parts or damage should be retained. In the event of damage notification to the manufacturer is required.

6. Loading dock equipment that has been structurally damaged or has experienced a sudden loss of main support while under load (such as what might occur when a transport vehicle pulls out from under the leveling device) shall be removed from service, inspected by a manufacturer's authorized representative, and repaired or replaced as needed before being placed back in service.

7. Any modifications or alterations of loading dock equipment shall only be done with prior written approval from the manufacturer and the same shall be at least as safe as the original equipment was prior to the modification and shall also satisfy all safety requirements of the manufacturer for the particular application of the leveling device.

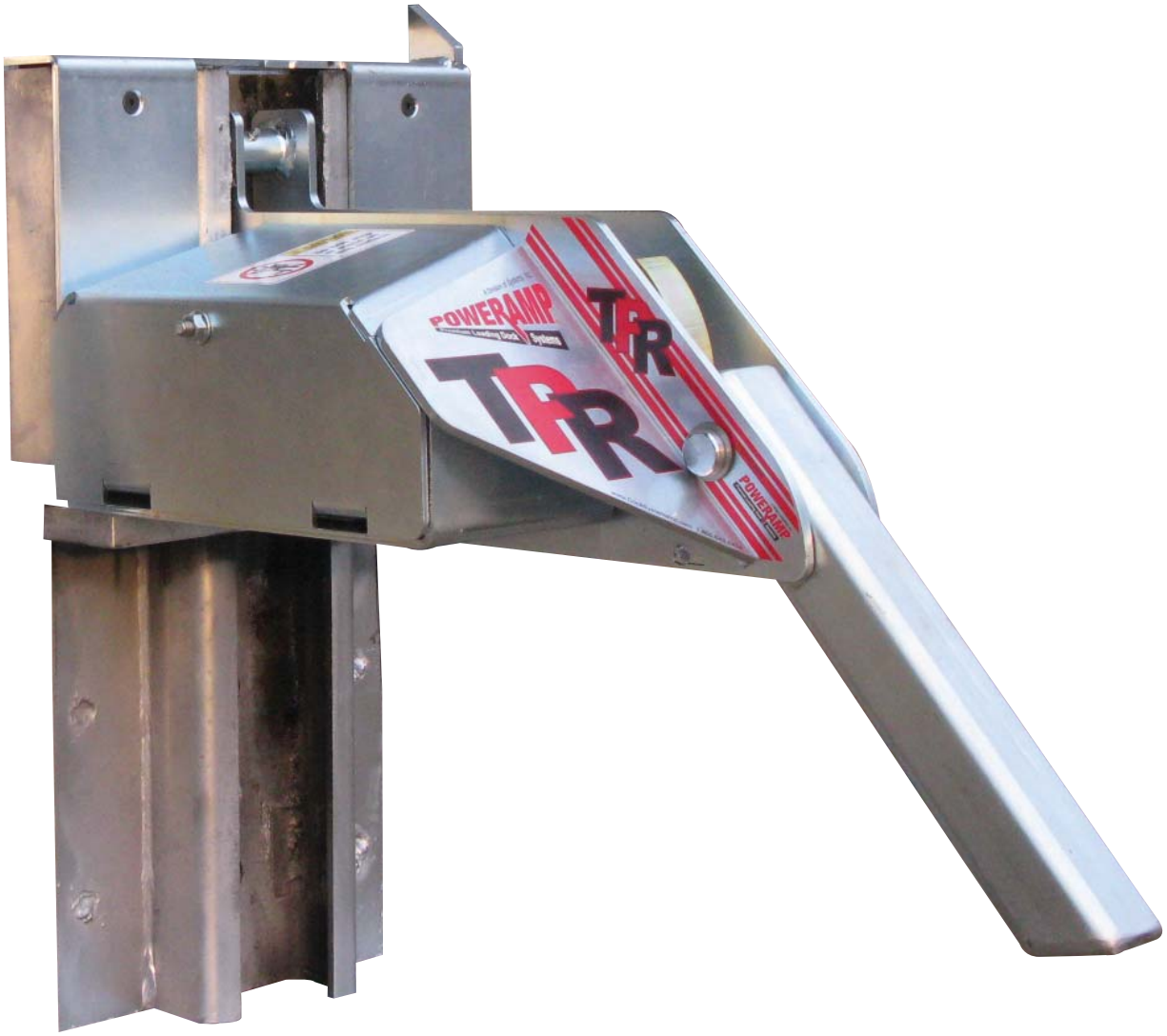
8. When industrial moving devices are being used in the loading or unloading of product from the transportation vehicle, this vehicle shall have the brakes and wheel chocks applied appropriately or all other positive restraining device shall be fully utilized. It is recommended that transport vehicles with air-ride suspension systems shall have its air exhausted prior to performing loading and unloading operation to minimize transport vehicle bed drop.

9. Loading dock safety equipment should never be used outside of its intended use, vertical working range, or capacity. Please consult the manufacturer if you have any questions as to the use, vertical working range or capacity of the equipment. Only properly trained and authorized personnel should operate the equipment.

10. When selecting loading dock safety equipment, it is important to consider not only present requirements but also future plans and any possible adverse conditions, environmental factors or usage.

INTRODUCTION

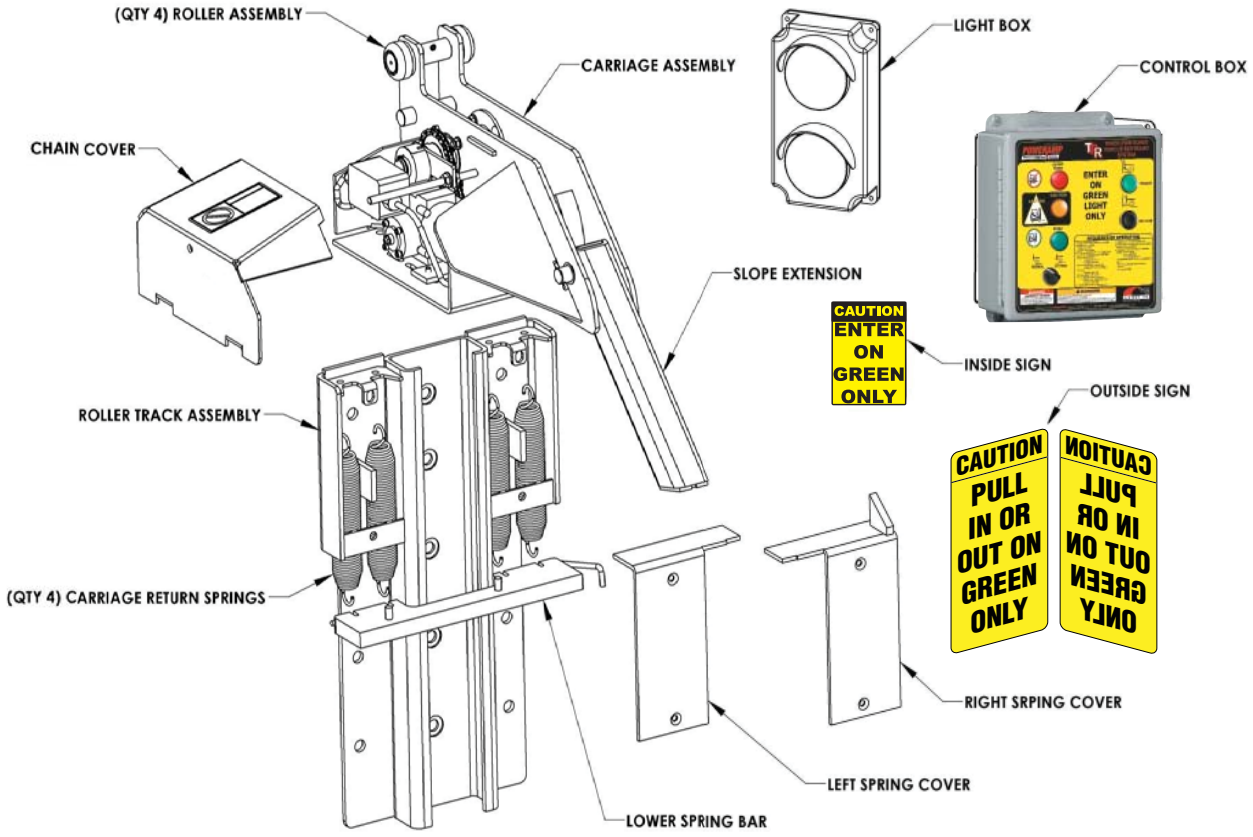
General Information



Due to ongoing product improvement, some parts have changed, along with operation and trouble shooting methods. This manual describes these changes. For further assistance, please contact:

Technical Service at 800-643-5424 or techservices@docksystemsinc.com

Component Identification



INSTALLATION

INSTALL ROLLER TRACK PLATE

Install roller track plate onto dock face at specified location by welding to an embedded steel plate or by using the fifteen (15) concrete anchors provided in conjunction with welding to pit steel and a leveler frame.

If you have questions, contact Technical Support at (800) 643-5424.

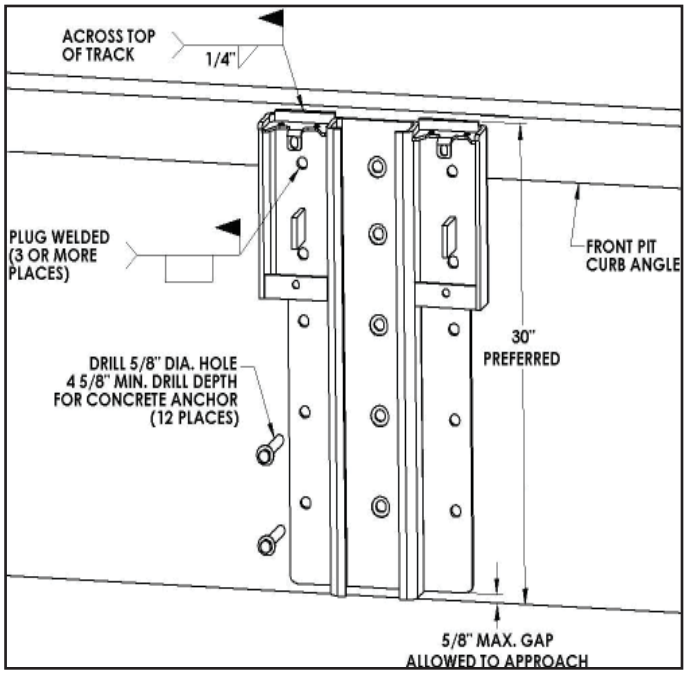
The roller track plate must be plumb with dock face. If not, use and weld (6) shims 2” wide x 25 5/8” long. If shims are over 1/2” thick use longer anchors. If shims need to be 1” thick or more, contact McGuire. Technical Support

NOTE: Trim roller track plate, as necessary, up to a maximum of 5” from the bottom.

NOTE: Some mechanical dock levelers have an adjusting nut access hole in the leveler front subframe. If the TPR vehicle restraint roller track interferes with the access hole, the track plate must be cut to allow access.

NOTE: Some levelers are slightly recessed within the pit and thus require a shim to be inserted between the roller track plate and the leveler front subframe and welded in place.

Fifteen (15) concrete anchors are provided with each TPR vehicle restraint. An anchor must be installed in each roller track plate hole except for those plug-welded to embedded steel.


ACROSS TOP OF TRACK
1/4"
PLUG WELDED (3 OR MORE PLACES)
FRONT PIT CURB ANGLE
30" PREFERRED
DRILL 5/8" DIA. HOLE 4 5/8" MIN. DRILL DEPTH FOR CONCRETE ANCHOR (12 PLACES)
5/8" MAX. GAP ALLOWED TO APPROACH

ANCHOR INSTALLATION INSTRUCTIONS

- Put roller track plate in place.
- Drill hole of 5/8” diameter and minimum of 4-5/8” deep. Clean out hole.
- Insert anchor and drive flush with roller track plate, making sure that the threaded wedge is inserted first. Do not disassemble anchor prior to installation.
- Install all anchors and torque to 100 ft-lbs.

WELDING INSTALLATION INSTRUCTIONS

If the installation being worked on is a retrofit or replacement situation, the following electrical connections must be disconnected prior to welding:

LOCKOUT/TAGOUT the power at the fused disconnect, then remove the motor and limit switch connections from the control harness located in the outside junction box. Once all welding has been completed, reconnect all the wires.

NOTES:

1. NEVER install the TPR vehicle restraint directly onto concrete block or brick dock face.
2. When welding the TPR vehicle restraint, disconnect power and ground leads to leveler.
3. Due to actual conditions, total mounting height may be different.
4. Plug weld all holes that are in contact with the embedded mounting plate. All fifteen (15) holes must be either plug welded or anchored.
5. Shims must be the full length of the roller track mounting plate. Minimum electrode must be 1/8" 7018 or better.

⚠ WARNING

Post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the dock leveler before installation has been completed.

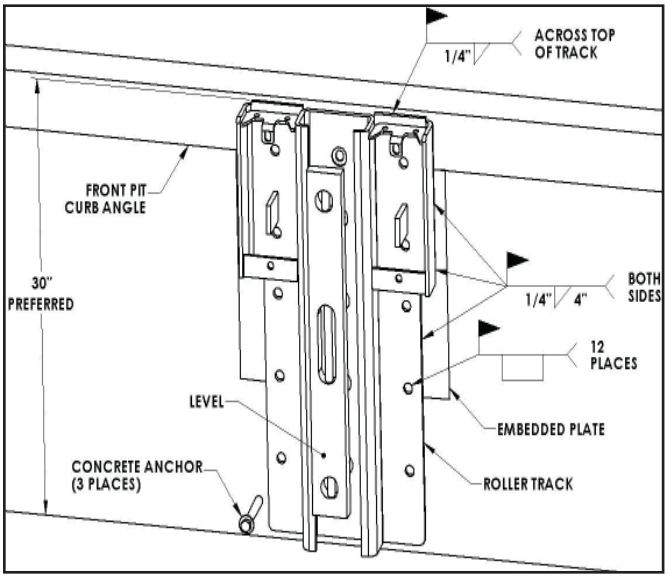
Failure to follow the installation instructions can result in damage to dock leveler, the facilities, and/or serious personal injury or death.

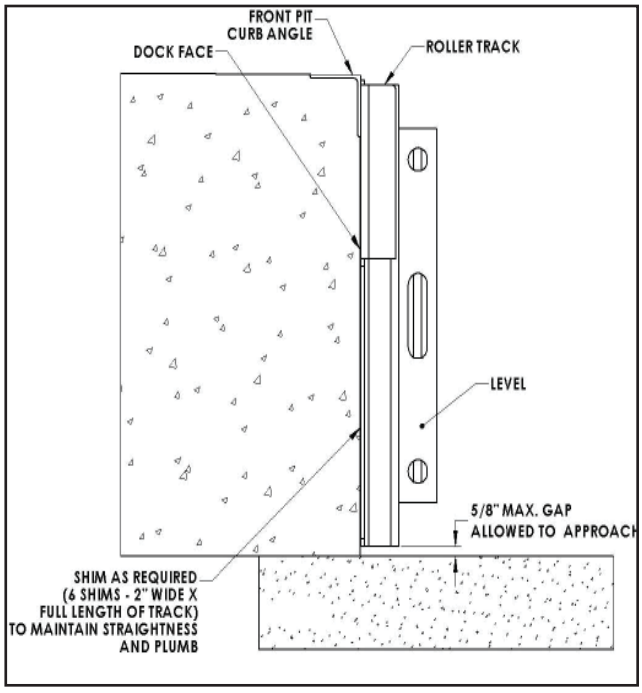
NOTICE

DO NOT connect the vehicle restraint electrical wiring and ground connections until all welding has been completed.

DO NOT ground welding equipment to any hydraulic or electrical components of the vehicle restraint. Always ground welding equipment to the dock leveler frame, NEVER to the platform.

Failure to follow these instructions may damage the motor, hoist cylinder, wiring, and/or control panel.



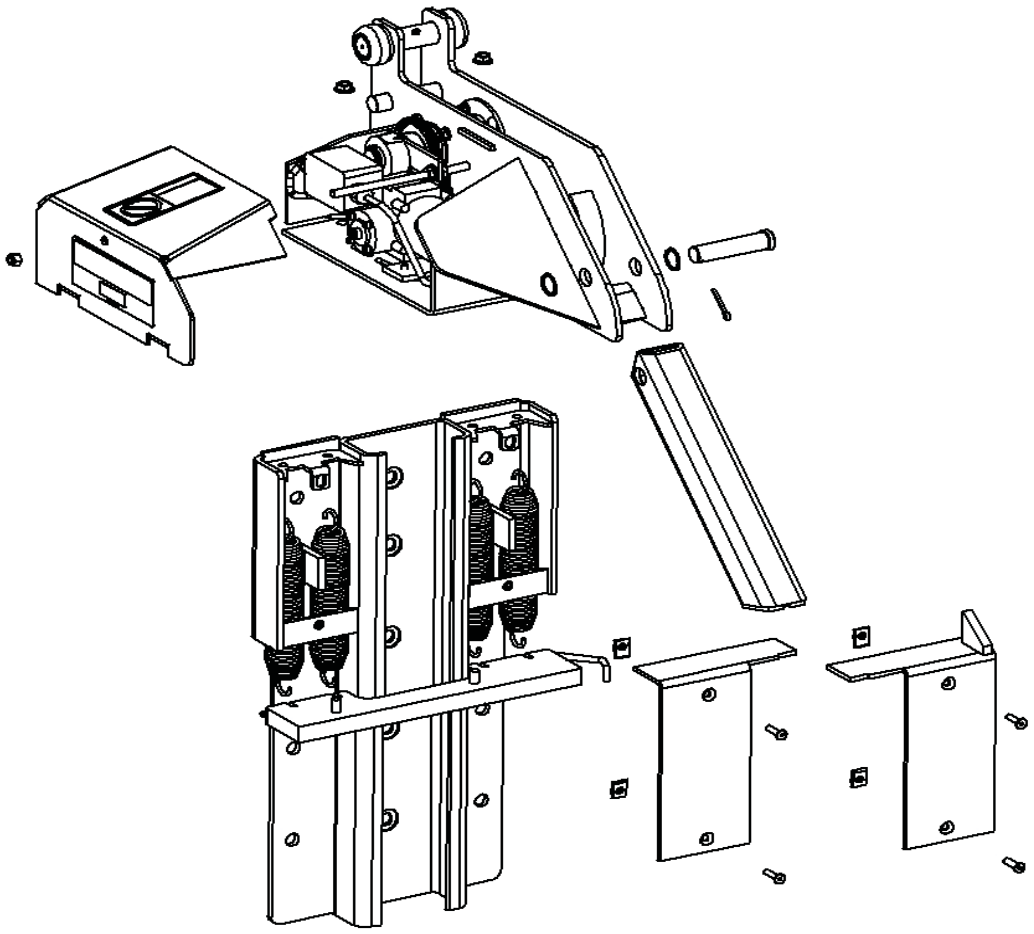

FRONT PIT CURB ANGLE
DOCK FACE
ROLLER TRACK
LEVEL
5/8" MAX. GAP ALLOWED TO APPROACH
SHIM AS REQUIRED (6 SHIMS - 2" WIDE X FULL LENGTH OF TRACK) TO MAINTAIN STRAIGHTNESS AND PLUMB

INSTALLATION

1. Attach the four (4) springs to the lower spring bar.
2. Pull springs upward and slide over top spring mount on the track roller plate.
3. Install right and left spring cover with clip nuts and flat head screws provided.
4. Slide the carriage assembly into the roller track.
5. Position and bolt the lower spring bar to the bottom of the TPR vehicle restraint carriage.
6. Install the motor cover and spring covers.
7. Install slope extension.

⚠ CAUTION

Use lifting device (e.g. crane, jack) when lifting carriage (approx. 110 lbs.). Lifting by hand may cause back injury.



DANGER

Make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

If the incoming electrical power for the TPR vehicle restraint is taken from a nearby electrical appliance, e.g., overhead door opener, verify that the amperage is in accordance with local and federal codes.

The TPR vehicle restraint 1/10 HP motor requires 120V, single phase power, 60 Hz power and 10 amps of current to operate properly.

If you have questions, contact Technical Support at (800) 643-5424.

CAUTION

When drilling access hole in the control box, DO NOT penetrate too deep, components may be damaged.

DO NOT turn control upside down to drill any access holes. To prevent damaged to electrical components from debris cover components prior to drilling

Seal all conduit entrances to prevent moisture from entering the control box.

DO NOT use compressed air to clean control box. Recommended to vacuum debris from inside.

The TPR vehicle restraint assembly includes a 63" long flexible wiring harness, the control box with lights and the outside signal light box. The outside junction box, conduit fittings and wire are provided by others; be sure to use a qualified installer utilizing quality materials.

Refer to component location information. Electrical schematics for wiring information can be found inside the control box.

WARNING

Post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the dock leveler before installation has been completed.

Failure to follow the installation instructions can result in damage to dock leveler, the facilities, and/or serious personal injury or death.

NOTICE

DO NOT connect the vehicle restraint electrical wiring and ground connections until all welding has been completed.

DO NOT ground welding equipment to any hydraulic or electrical components of the vehicle restraint. Always ground welding equipment to the dock leveler frame, NEVER to the platform.

Failure to follow these instructions may damage the motor, hoist cylinder, wiring, and/or control panel.

CONTROL BOX INSTALLATION GUIDELINES - TEMPERATURE CONTROLLED APPLICATIONS

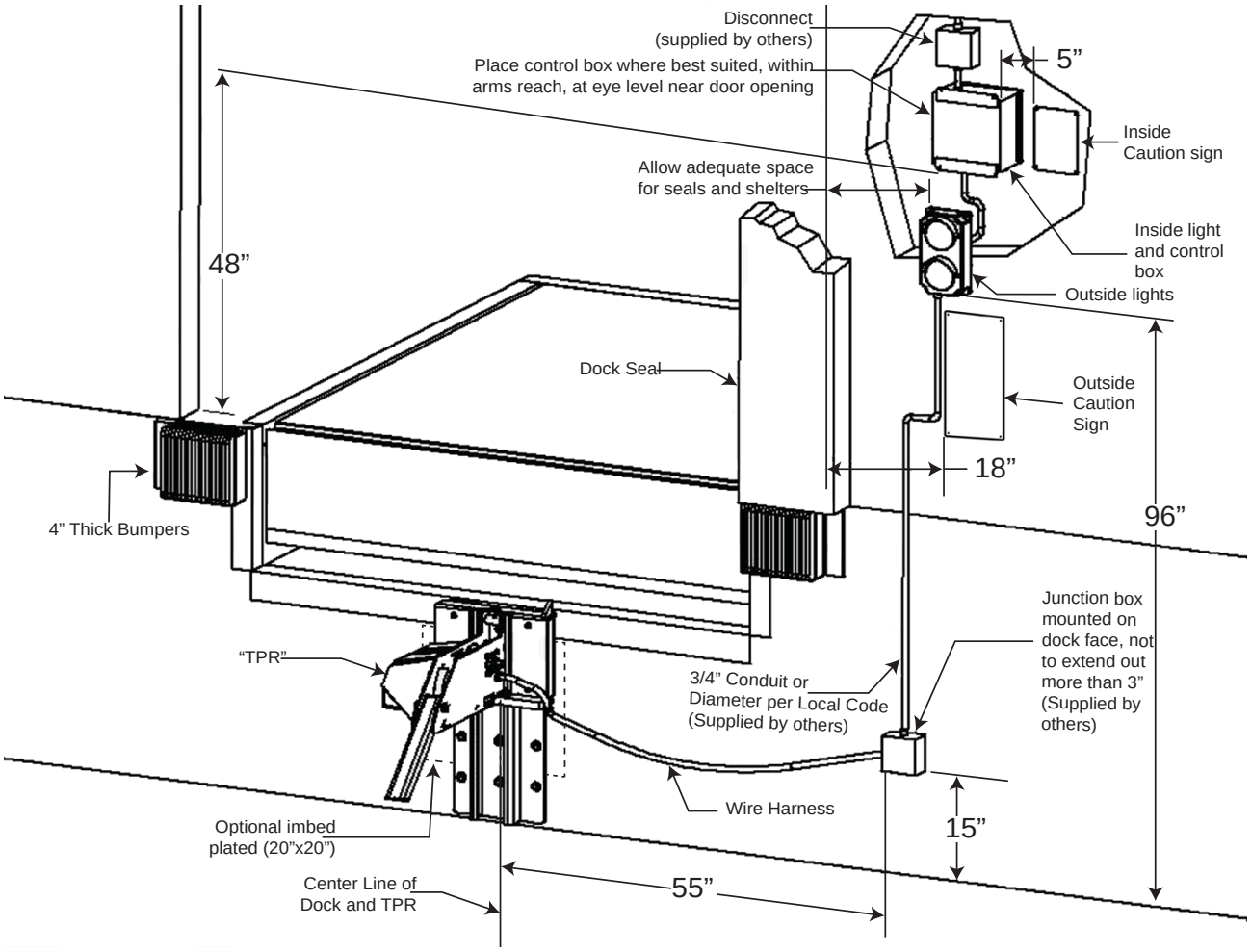
Route the conduit to enter through the side or bottom of the enclosure. If the conduit could fill with water, a drip leg may be needed.

Seal the conduit in any location where the conduit crosses over temperature zones that could produce condensation.

Install spacers between the wall and enclosure to provide temperature insulation and air flow.

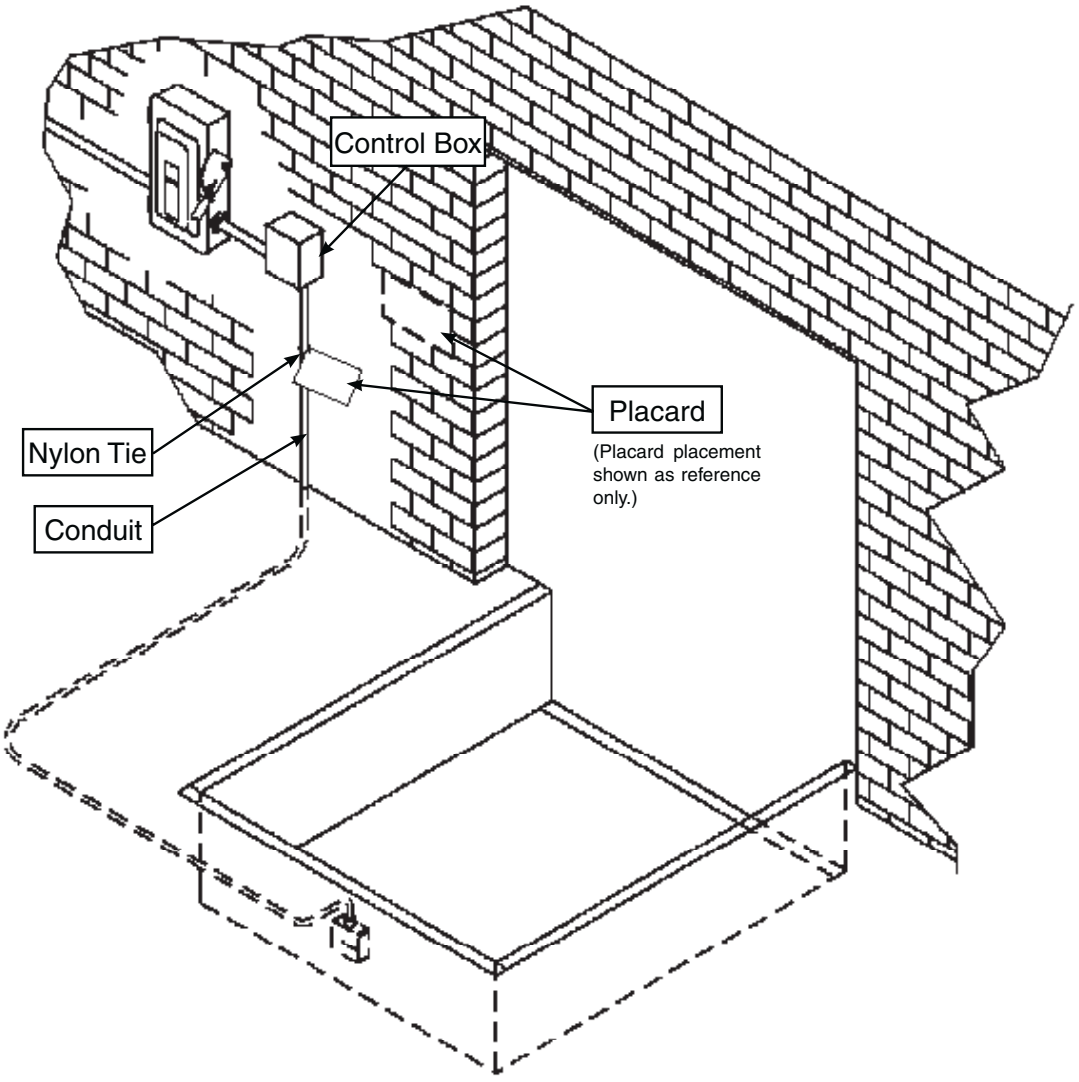
NOTICE

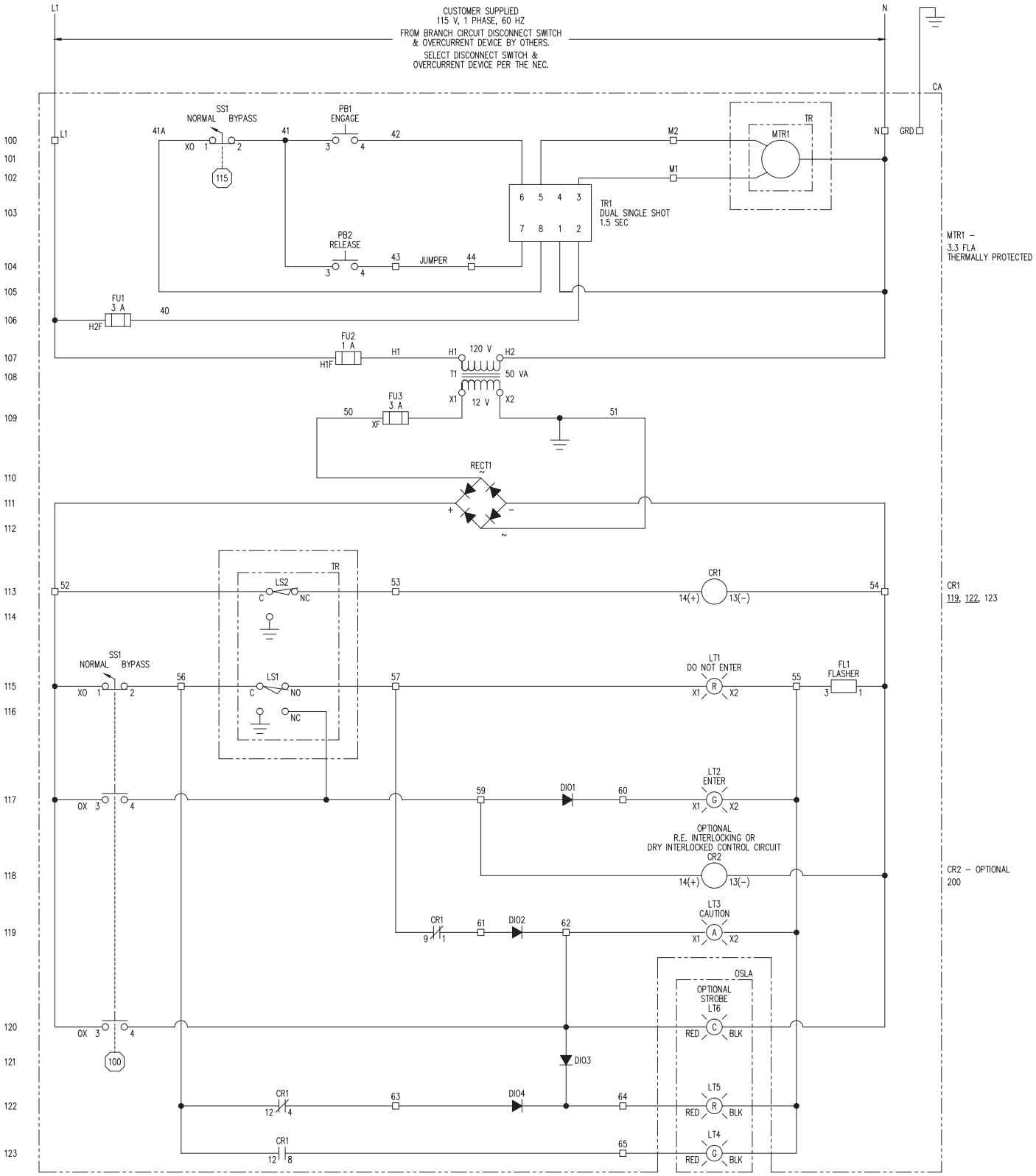
Where indicated, all components must be connected to a SAFETY EARTH GROUND that conforms to the 1999 National Electrical Code Section 250-50 section (a) or section (c) for a grounding electrode system.

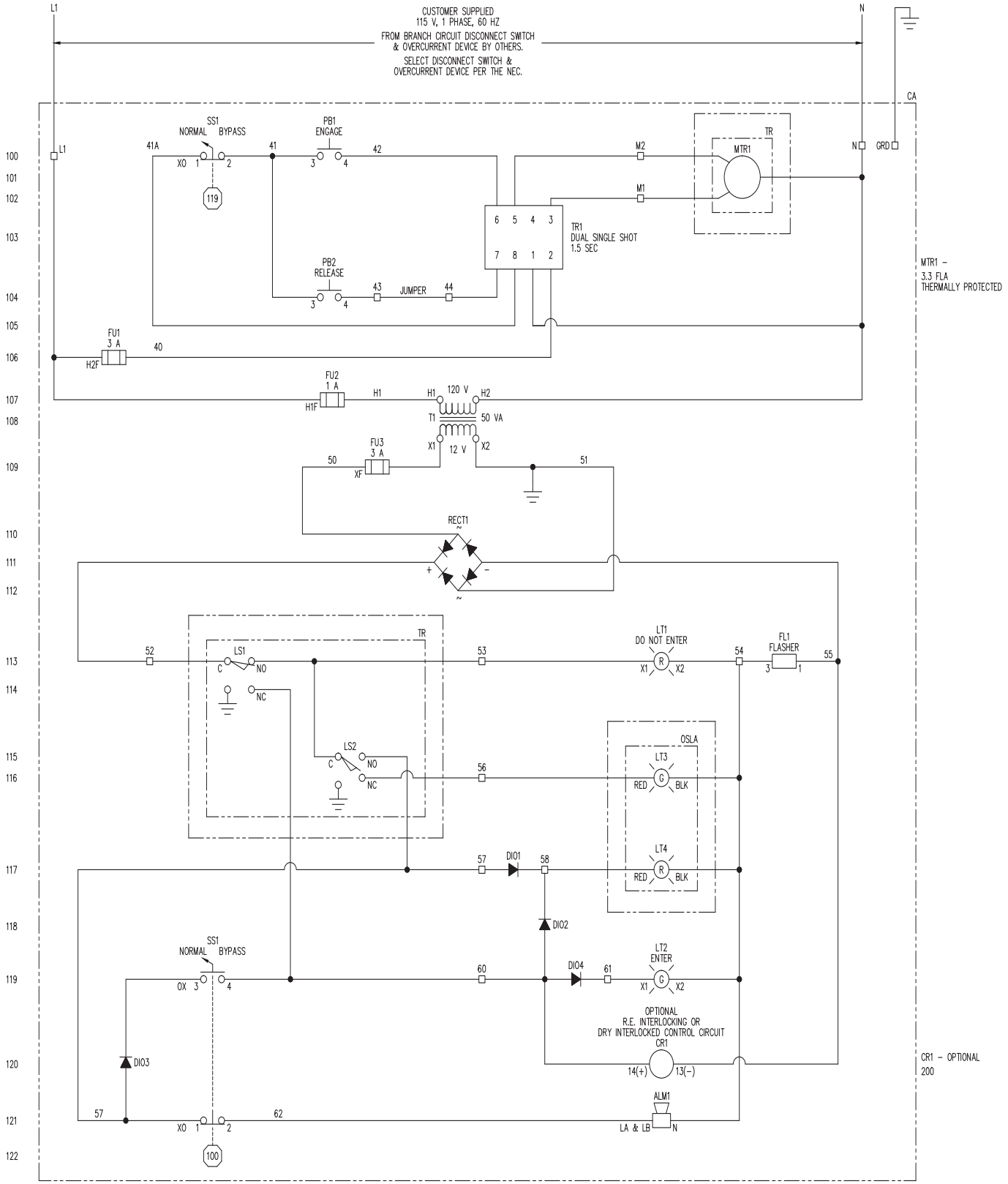

Disconnect
(supplied by others)
Place control box where best suited, within
arms reach, at eye level near door opening
5”
Inside
Caution sign
Allow adequate space
for seals and shelters
Inside light
and control
box
Outside lights
48”
Dock Seal
Outside
Caution
Sign
18”
96”
4” Thick Bumpers
Junction box
mounted on
dock face, not
to extend out
more than 3”
(Supplied by
others)
“TPR”
3/4” Conduit or
Diameter per Local Code
(Supplied by others)
Wire Harness
15”
Optional imbed
plated (20”x20”)
Center Line of
Dock and TPR
55”

Placard Installation Instructions

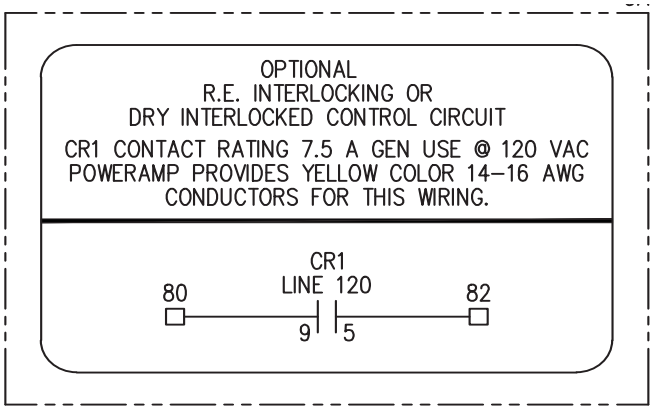
- Owner is responsible for the installation and placement of product placards.
- Make sure placard is in plain view of dock leveler operations.
- Suggested placement of placard is near control box attached to electrical conduit by using nylon tie. If there is no control box present, mount placard on wall to the immediate left of leveler at eye level.




CUSTOMER SUPPLIED
115 V, 1 PHASE, 60 HZ
FROM BRANCH CIRCUIT DISCONNECT SWITCH
& OVERCURRENT DEVICE BY OTHERS.
SELECT DISCONNECT SWITCH &
OVERCURRENT DEVICE PER THE NEC.
L1
N
CA
GRD
SS1
NORMAL BYPASS
PB1
ENGAGE
PB2
RELEASE
JUMPER
TR
MTR1
TR1
DUAL SINGLE SHOT
1.5 SEC
FU1
3 A
FU2
1 A
FU3
3 A
120 V
50 VA
12 V
RECT1
LS1
LS2
CR1
CR2
LT1
DO NOT ENTER
LT2
ENTER
LT3
CAUTION
FL1
FLASHER
DIO1
DIO2
DIO3
DIO4
OPTIONAL
R.E. INTERLOCKING OR
DRY INTERLOCKED CONTROL CIRCUIT
OSLA
OPTIONAL
STROBE
LT6
LT5
LT4
MTR1 –
3.3 FLA
THERMALLY PROTECTED
CR1
119, 122, 123
CR2 – OPTIONAL
200


CUSTOMER SUPPLIED
115 V, 1 PHASE, 60 HZ
FROM BRANCH CIRCUIT DISCONNECT SWITCH
& OVERCURRENT DEVICE BY OTHERS.
SELECT DISCONNECT SWITCH &
OVERCURRENT DEVICE PER THE NEC.
L1
N
GRD
CA
SS1
NORMAL BYPASS
PB1
ENGAGE
PB2
RELEASE
JUMPER
TR
MTR1
M1
M2
TR1
DUAL SINGLE SHOT
1.5 SEC
MTR1 –
3.3 FLA
THERMALLY PROTECTED
FU1
3 A
FU2
1 A
FU3
3 A
120 V
12 V
50 VA
RECT1
LS1
LS2
NO
NC
LT1
DO NOT ENTER
FL1
FLASHER
OSLA
LT3
LT4
RED
BLK
DIO1
DIO2
DIO3
DIO4
LT2
ENTER
OPTIONAL
R.E. INTERLOCKING OR
DRY INTERLOCKED CONTROL CIRCUIT
CR1
CR1 – OPTIONAL
200
ALM1
LA & LB
100
119

INTERLOCKING LOAD DATA AND NOTES



LOAD DATA – EXTERNAL CONTROL CIRCUIT LOADS ALL LOADS 12 VDC	
LEGEND	AMP RATING
LT3,4	0.13 A @ 12 V (EACH)

COMPONENT LOCATION TABLE. COMPONENT LOCATION INDICATED BY PHANTOM LINES (— - - — - - —)	
LEGEND	LOCATION
CA	CONTROL ASSY (UL LISTED PANEL)
OSLA	OUTSIDE SIGNAL LIGHT ASSY
TR	TRUCK RESTRAINT

NOTES
A. DRAWING SHOWS SYSTEM AT REST WITH POWER OFF & RESTRAINT FULLY LOWERED.
B. ☐ REPRESENTS A TERMINAL BLOCK.
C. WIRE COLORS NEAR COMPONENT REFER TO COLOR OF WIRE SUPPLIED BY THE COMPONENT MFGR.
D. NUMBERS NEAR COMPONENT REFER TO NUMBERS FOUND ON THE TERMINALS OF THE COMPONENT.

Operating Instructions

DANGER

Stay clear of dock leveler when transport vehicle carrier is entering or leaving dock area.

DO NOT move or use the dock leveler if anyone is under or in front of leveler.

Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.

Failure to follow these instructions may result in severe personal injury or death.

WARNING

Only trained personnel should operate the dock leveler and vehicle restraint.

DO NOT use a broken or damaged dock leveler or vehicle restraint. Make sure proper service and maintenance procedures have been performed on equipment before using.

Transport vehicle wheels must be chocked unless the vehicle restraint is used. Never remove the wheel chocks until loading/unloading is finished and transport driver has been given permission to leave.

Make sure platform lip rests on the transport vehicle bed with at least 4 in. (102 mm) of overlap.

Maintain a safe distance from side edges of leveler during the loading/unloading process.

Failure to follow these instructions may result in serious personal injury or death.

WARNING

DO NOT overload the dock leveler.

DO NOT operate any equipment while under the influence of alcohol or drugs.

DO NOT leave equipment or material unattended on the dock leveler.

Failure to follow these instructions may result in personal injury and/or damage to equipment.

Before loading or unloading a vehicle at your loading dock while using a TPR vehicle restraint, always visually inspect to be sure that the restraint is engaged with the Rear Impact Guard (RIG). If the restraint is still not engaged after backing the transport vehicle firmly against the dock bumpers, secure the transport vehicle by other means.

Be sure that the area around the RIG assembly is clear of obstructions.

Always operate the TPR vehicle restraint from the top of the dock.

Inspect all restraint lights daily to make certain they work properly.

Perform maintenance on restraints in accordance with Maintenance in this manual.

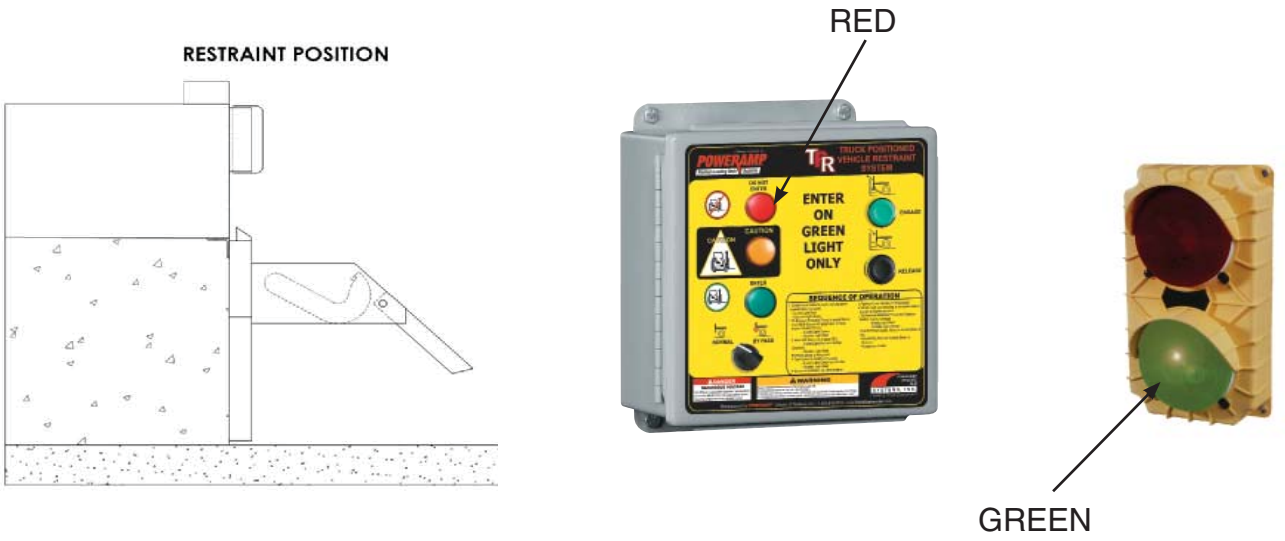
TPR vehicle restraints should be operated only by authorized personnel who have read and understand the Owner's/User's Manual.

If you have questions, Call your local representative or Systems Inc. at (800) 643-5424

FAILURE TO FOLLOW THESE PROCEDURES COULD RESULT IN SERIOUS INJURY OR DEATH.

OPERATION

Stored Position / Restraint UNLOCKED (3 Light System)
Hook is in the STORED position. Inside light is flashing RED alerting forklift operator unsafe condition exists. Outside light is flashing GREEN alerting transport vehicle driver it is safe to back in.



ENGAGE Button Depressed - Restraint ENGAGING (3 Light System)
Transport vehicle has backed into loading dock and is parked firmly against dock bumpers. Hook rotates from stored position to engage RIG. Outside light is flashing RED alerting transport vehicle driver not to move. Inside light flashing GREEN.

If YELLOW caution light comes on proceed to FAULT, otherwise proceed to Restraint ENGAGED.

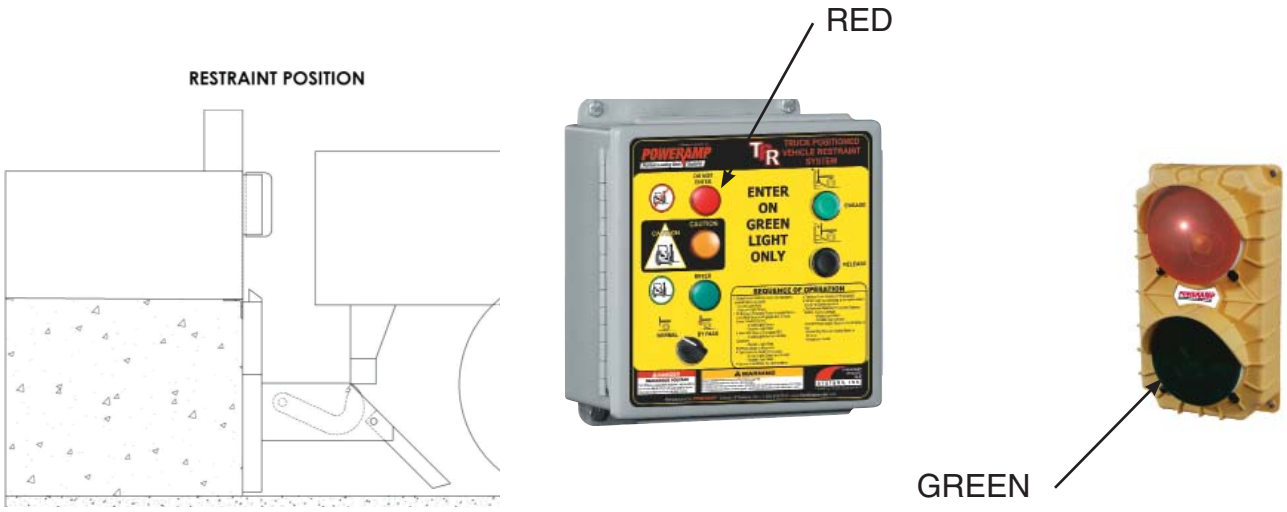
RELEASE Button Depressed - Restraint DISENGAGING (3 Light System)
Hook travels from the ENGAGED position to the STORED position. Outside light is flashing RED alerting transport vehicle driver not to move. Inside light is flashing RED. Once the hook is stored the outside light with flash GREEN, alerting the drive it is safe to depart.

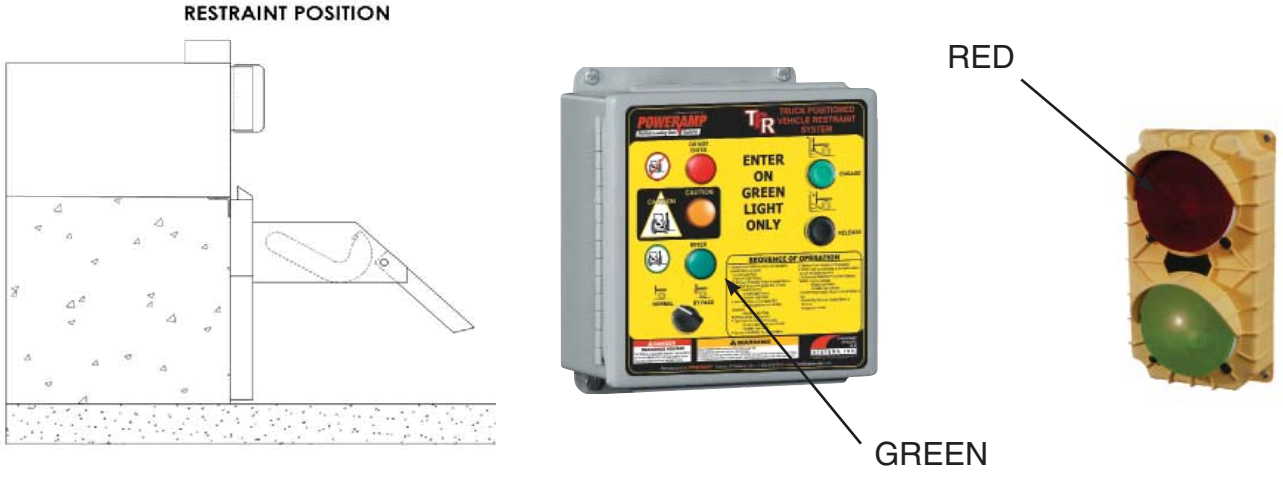
FAULT from ENGAGING State (3 Light System)
Hook cannot engage the RIG. This could be due to a RIG that is located too far toward the rear axle, bent, obstructed or missing. Inside light is flashing RED and YELLOW light is flashing, alerting the forklift operator that the transport vehicle is not locked. Outside light is flashing RED alerting the transport vehicle driver not to move.

If the transport vehicle is parked firmly against the dock bumpers proceed to BY PASS. If not, press RELEASE to clear the fault, have transport vehicle back up and repeat Restraint ENGAGING.

OPERATION

BY PASS from ENGAGING State (3 Light System)
Hook cannot engage the RIG. Switch the selector to BY PASS. The YELLOW and GREEN inside lights will flash. Proceed with caution. Outside light will flash RED.



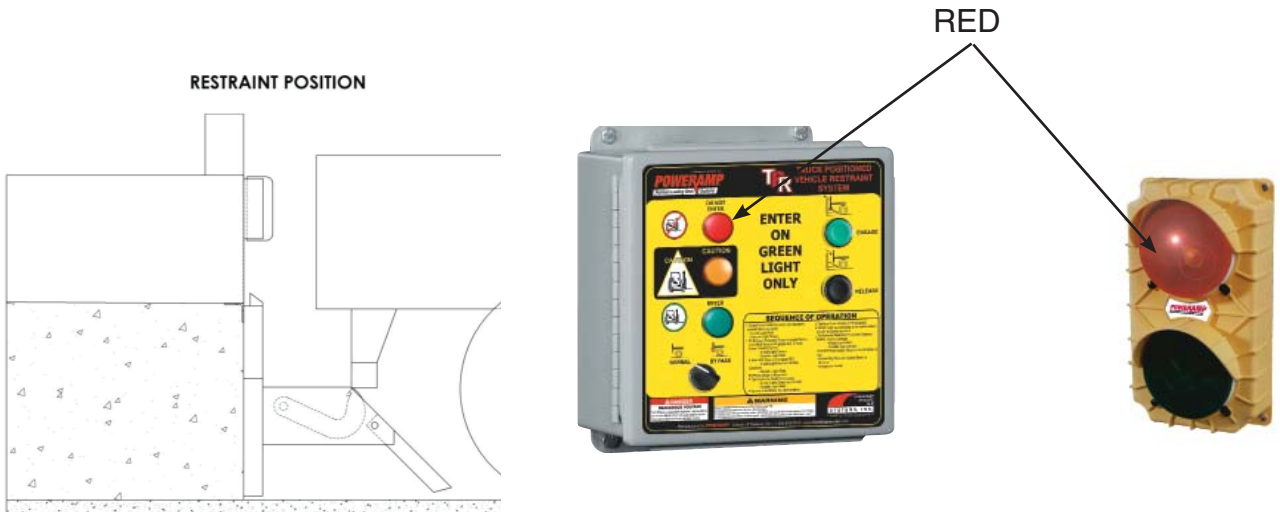


BY PASS to STORED State (3 Light System)
Once loading or unloading complete. Switch the selector to NORMAL. Press the RELEASE button, IF hook is not in the stored position, inside light will flash RED. Outside light will flash GREEN, The transport vehicle can now depart.

FAULT from ENGAGING State (3 Light System)

Hook cannot engage the RIG. This could be due to a RIG that is located too far toward the rear axle, bent, obstructed or missing. Inside light is flashing RED and YELLOW, alerting the forklift operator that the transport vehicle is not locked. Outside light is flashing RED alerting the transport vehicle driver not to move.

If the transport vehicle is parked firmly against the dock bumpers proceed to BY PASS. If not, press RELEASE to clear the fault, have transport vehicle back up and repeat Restraint ENGAGING.



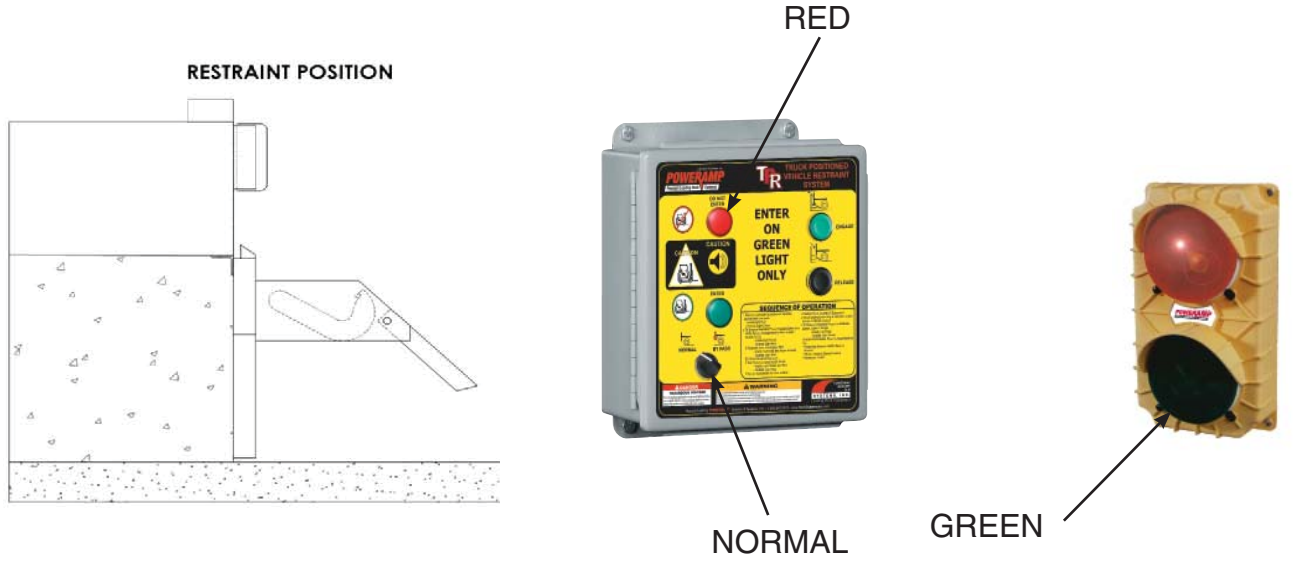
BY PASS State, SWITCH TO BY PASS (3 Light System)
After Securing Trailer by Alternate Means

An alternate means of securing the transport vehicle must be used (e.g. wheel chocks) if the hook can not capture the RIG. Switch selector switch to BY PASS. Inside lights are flashing YELLOW and GREEN alerting the forklift operator the trailer is secured by other means. Outside light is flashing RED alerting the transport vehicle driver not to move.

To return to STORED, turn the BY PASS to NORMAL and press the RELEASE button. If hook was not STORED already

OPERATION

BY PASS from ENGAGING State (2 Light System)
Hook cannot engage the RIG. The restraint must engaged and in the Hook rotated fully up, the ALARM will sound. Switch the selector to BY PASS. The GREEN inside lights will flash ALARM will turn off. Proceed with caution. Outside light will flash RED.

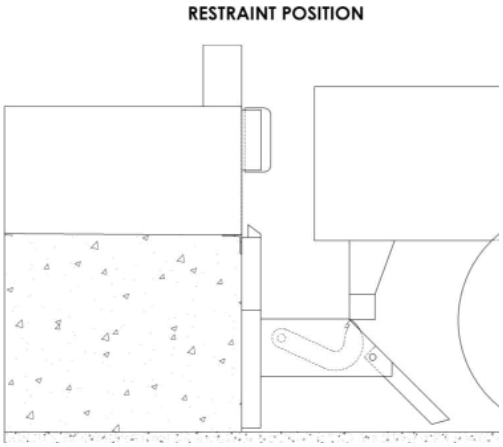


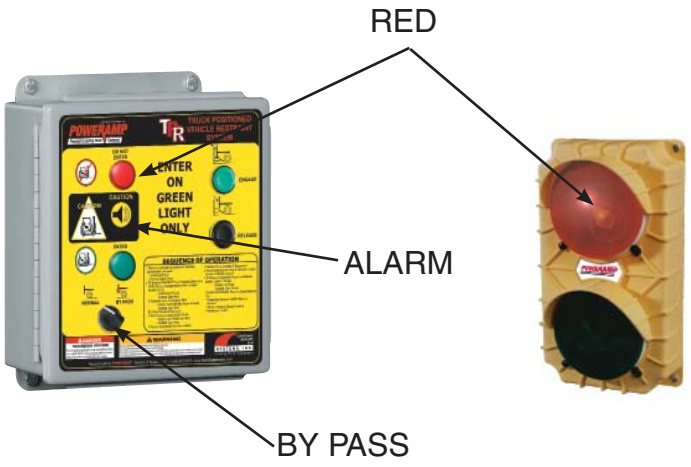
BY PASS to STORED State (2 Light System)
Once loading or unloading complete. Switch the selector to NORMAL ALARM will sound. Press the RELEASE button, IF hook is not in the stored position, inside light will flash RED. Outside light will flash GREEN, The transport vehicle can now depart.

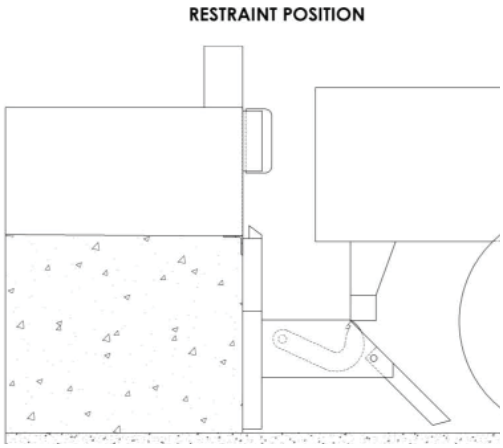
FAULT from ENGAGING State With OPTIONAL ALARM

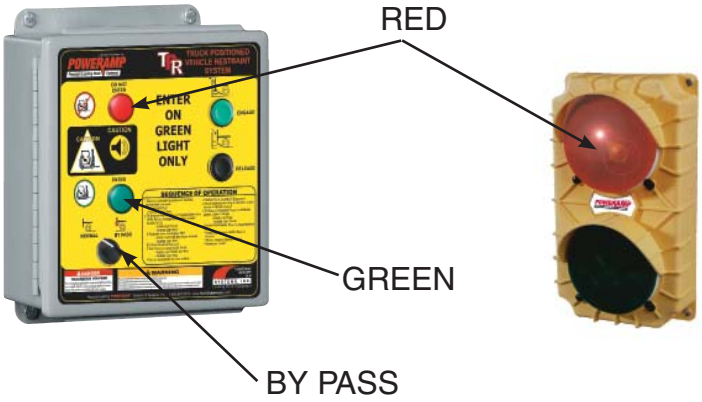
Hook cannot engage the RIG. This could be due to a RIG that is located too far toward the rear axle, bent, obstructed or missing. Inside light is flashing RED and ALARM, alerting the forklift operator that the transport vehicle is not locked. Outside light is flashing RED alerting the transport vehicle driver not to move.

If the transport vehicle is parked firmly against the dock bumpers proceed to BY PASS. If not, press RELEASE to clear the fault, have transport vehicle back up and repeat Restraint ENGAGING.







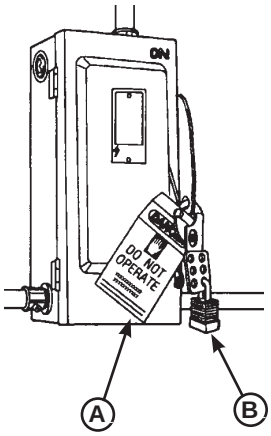


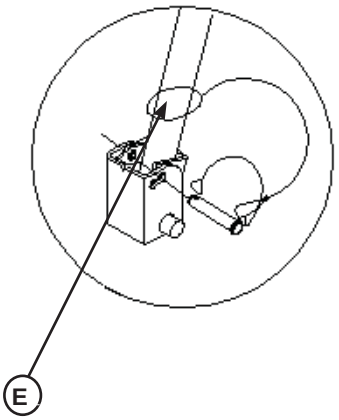
BY PASS State, SWITCH TO BY PASS WITH ALARM
After Securing Trailer by Alternate Means

An alternate means of securing the transport vehicle must be used (e.g. wheel chocks) if the hook can not capture the RIG. Switch selector switch to BY PASS, silences the ALARM. Inside lights are flashing RED and GREEN alerting the forklift operator the trailer is secured by other means. Outside light is flashing RED alerting the transport vehicle driver not to move.

To return to STORED, turn the BY PASS to NORMAL and press the RELEASE button. If hook was not STORED already

Service Dock Leveler/Restraint Safely





⚠ WARNING

Safe operation of the TPR truck restraint requires all lights and the Alarm to be working properly. DO NOT use TPR vehicle restraint if parts are broken or missing.

⚠ WARNING

Use lifting device (e.g. crane, jack) when lifting carriage (approx. 110 lbs.). Lifting by hand may cause back injury.

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged (A)-(B) according to OSHA regulations and approved local electrical codes.

Post safety warnings and barricade work area, at dock level and at ground level, to prevent unauthorized use of the dock.

NOTE: If a leveler is installed at the TPR vehicle restraint location, it may be necessary to raise the leveler before performing maintenance. Raise the leveler, insert and secure the maintenance strut (C), and LOCKOUT/TAGOUT (A)-(B) the power source.

Service Dock Leveler/Restraint Safely

DAILY

- Remove debris around TPR vehicle restraint.
- Verify that restraint operates smoothly and inside, outside lights and horn are working.
- Replace damaged or missing light bulbs and lenses.
- Repair, remount, or replace outside and inside signs and labels as required.
- Inspect dock bumpers. Missing bumpers must be replaced.

180 DAYS

- Perform all Daily maintenance.
- Grease rollers at fittings located on the top and bottom axle with a synthetic oil-base moly grease with a temperature range of –40° to 170° F.
- Verify brake torque is greater than 42 ft-lbs at the hook shaft, rotating the hook from ENGAGED to STORED.
- Inspect the outside electrical connections (junction box, conduit, power harness) and outside communication light. Loose or damaged components must be repaired or replaced.
- Check that all concrete anchor bolts are torqued to 100 ft-lbs.
- Perform operational test after all maintenance repairs and adjustments are complete.
- Inspect dock bumpers. Four inches (4") of protection is required. Worn, torn, loose or missing bumpers must be replaced.

360 DAYS

- Perform all Daily and 180 Day maintenance.
- Check and tighten, if necessary, motor drive chain. To tighten see.
- Lube chain using chain lube.
- Lubricate limit switch mounting bracket between drive sprocket and cam with a synthetic oil-base moly grease with a temperature range of –40° to 170° F .

ADJUSTMENTS

DRIVE CHAIN ADJUSTMENT

1. Inspect the drive chain periodically for dirt and chain slack. Open the motor enclosure and clean the chain with solvent. After cleaning, spray with a high quality chain spray type lubricant.

2. The drive chain should not have more than 1/4" slack. To tighten chain:

3. Open motor enclosure and loosen the three (4) motor mounting bolts.

4. Pry the motor assembly forward, in the slotted holes, until the chain is tight with proper alignment between sprockets.

5. Hold in this position and tighten the three (4) motor mounting bolts to 5- ft lbs.

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

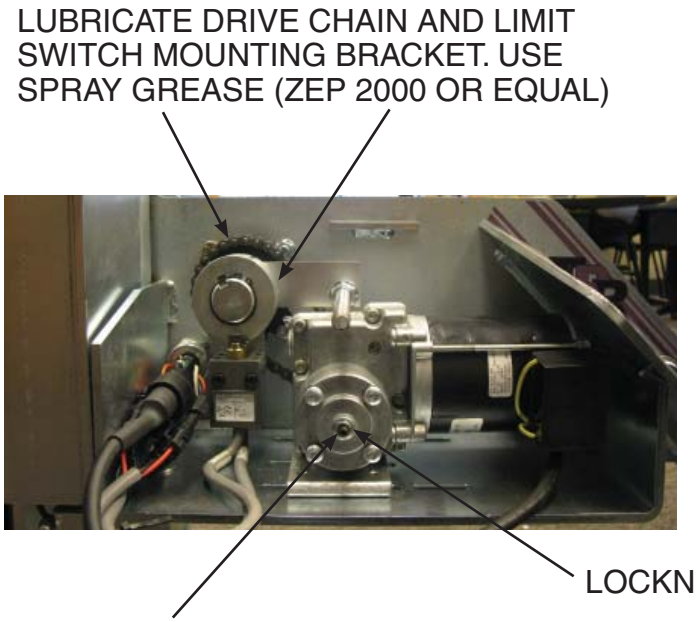
BRAKE TORQUE ADJUSTMENT

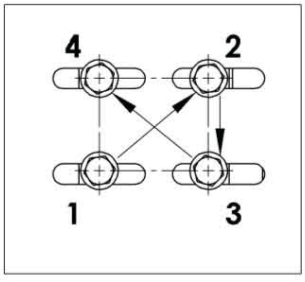
1. Loosen brake adjuster locknut while holding the adjuster screw to prevent inadvertent adjustment.

2. Turn adjuster screw clockwise to increase brake torque as needed.

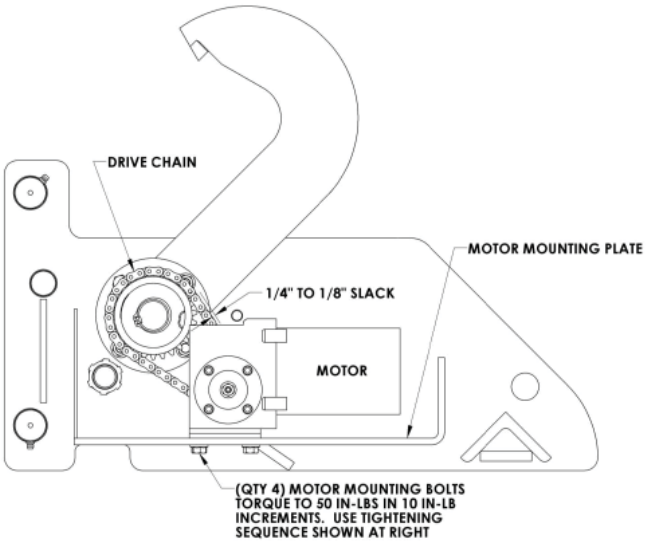
3. Tighten adjuster locknut while holding the adjuster screw to prevent inadvertent adjustment.

4. Verify brake torque is greater than 42 ft-lbs at the hook shaft; readjust as required.


LUBRICATE DRIVE CHAIN AND LIMIT SWITCH MOUNTING BRACKET. USE SPRAY GREASE (ZEP 2000 OR EQUAL)
LOCKNUT
BRAKE ADJUSTER SET SCREW



LOOKING AT BOTTOM OF MOTOR MOUNTING PLATE

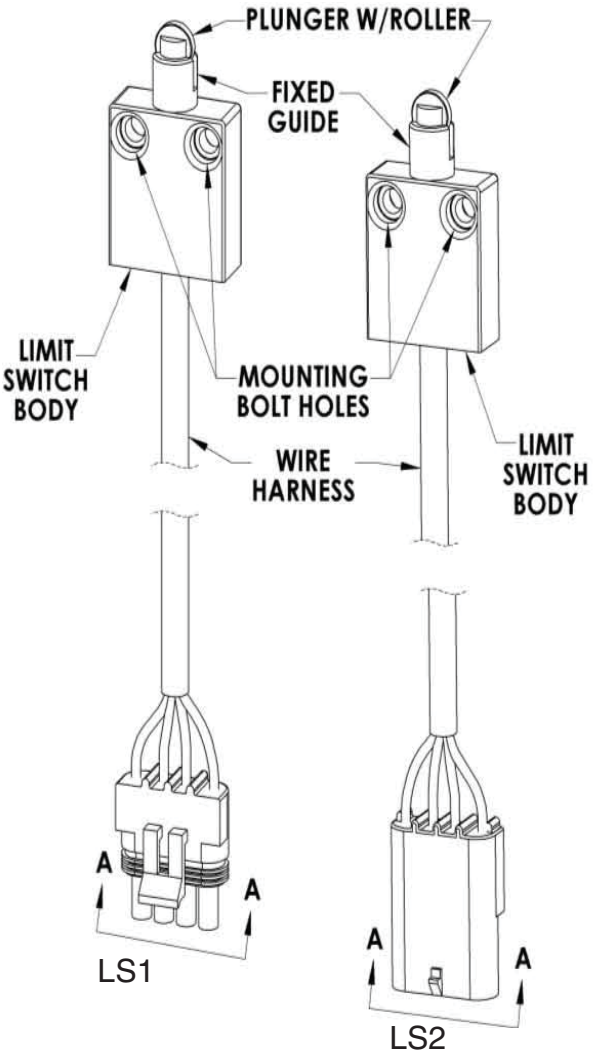

DRIVE CHAIN
MOTOR MOUNTING PLATE
1/4" TO 1/8" SLACK
MOTOR
(QTY 4) MOTOR MOUNTING BOLTS TORQUE TO 50 IN-LBS IN 10 IN-LB INCREMENTS. USE TIGHTENING SEQUENCE SHOWN AT RIGHT

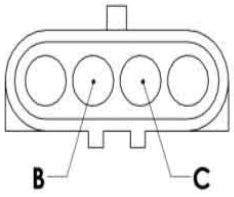
Symptom	Possible Cause	Solution
TPR Vehicle restraint lights do not flash and the hook does not raise.	Power source malfunction.	Check for blown fuse at branch circuit disconnect.
	Incorrect wiring.	Verify electrical schematics page 16.
TPR vehicle restraint lights are flashing but the hook does not raise or lower to full extent.	Chain is loose or broken.	Adjust or replace as required.
	Low incoming voltage.	Verify in coming power at L1 and L2.
	Drive motor defective	Check motor, repair or replace.
	Incorrect wiring.	verify wiring per electrical schematic.
	Incorrect break torque.	break torque should not exceed 42 ft-lbs.
TPR vehicle restraint is operational but hooks drops causing lights to change and/horn to sound while trailer is being serviced.	Verify brake torque.	If brake torque is less than 42 ft-lbs or chain is loose or broken adjust or replace as required.
	Drive motor defective.	Check motor. Repair or replace as needed.
TRP vehicle restraint is operational but all lights are out .	LED lights.	Check and replace Led lights as needed.
	Flasher.	Check flasher if bad replace.
TPR vehicle restraint horn does not sound but hook and lights are operational.	Horn is defective.	Power horn using 12V DC if does not sound replace horn. (page 17).
Lights not working in correct order.	Incorrect wiring.	Verify all field wiring connections are correct (page 16).
	Inside Red does not change.	Defective LS1.
	Out side lights and inside Green light does not change.	Defective LS2.
TPR vehicle restraint carriage does not return to full up position.	Broken or weak springs.	Recommend to replace all springs.
	Damaged roller track plate.	Verify that the roller track plate is straight and damaged.
	Carriage binding in track.	Clean debris out of roller track and or verify roller bearings are greased and move freely.

LIMIT SWITCH TEST PROCEDURE

- Set multimeter to Ohms “Continuity Test”.
- Attach multimeter leads to pins “B” and “C” of limit switch connector. You should have: -plunger released - no meter reading -plunger depressed - a “Full Scale” meter reading

NOTE: The green (ground) wire of the limit switch does not have to be tested. A continuity test lamp may be used instead of a multimeter.





VIEW A-A

HOOK POSITION	LS1 POSITION	LS2 POSITION	INSIDE LIGHT	OUTSIDE LIGHT	HORN
1. STORED	CLOSED DEPRESSED	OPEN RELEASED	RED	GREEN	OFF
2. NO HOOK (LOWER POS.)	CLOSED DEPRESSED	CLOSED DEPRESSED	RED	RED	ON
3. HOOKED (90°)	OPEN DEPRESSED	CLOSED DEPRESSED	GREEN	RED	OFF
4. NO HOOK (UPPER POS.)	CLOSED DEPRESSED	CLOSED DEPRESSED	RED	RED	ON

TPR - 2 LIGHT SEQUENCE OF OPERATION - SWITCHES & LIGHTS

NORMAL					
Position of Restraint	Switches		Lights & Alarm [a]		
	LS1	LS2	In Light	Out Light	Alarm (Panel)
Fully Lowered	Activated	Not Activated	R	G	OFF
Not Fully Lowered Not In Working Zone [b]	Activated	Activated	R	R	ON
In Working Zone [c]	Not Activated	Activated	G	R	OFF
Fully Raised	Activated	Activated	R	R	ON

BYPASS					
Position of Restraint	Switches		Lights & Alarm [a]		
	LS1	LS2	In Light	Out Light	Alarm (Panel)
Fully Lowered	Activated	Not Activated	R	G	OFF
Not Fully Lowered Not In Working Zone [b]	Activated	Activated	R & G	R	OFF
In Working Zone [c]	Not Activated	Activated	G	R	OFF
Fully Raised	Activated	Activated	R & G	R	OFF

[a] An Amber light not in the 2 light design.

[b] Not Fully Lowered, Not at ICC Bar, and Not Fully Raised.

[c] Not Fully Lowered, Supposingly at ICC Bar, and Not Fully Raised.

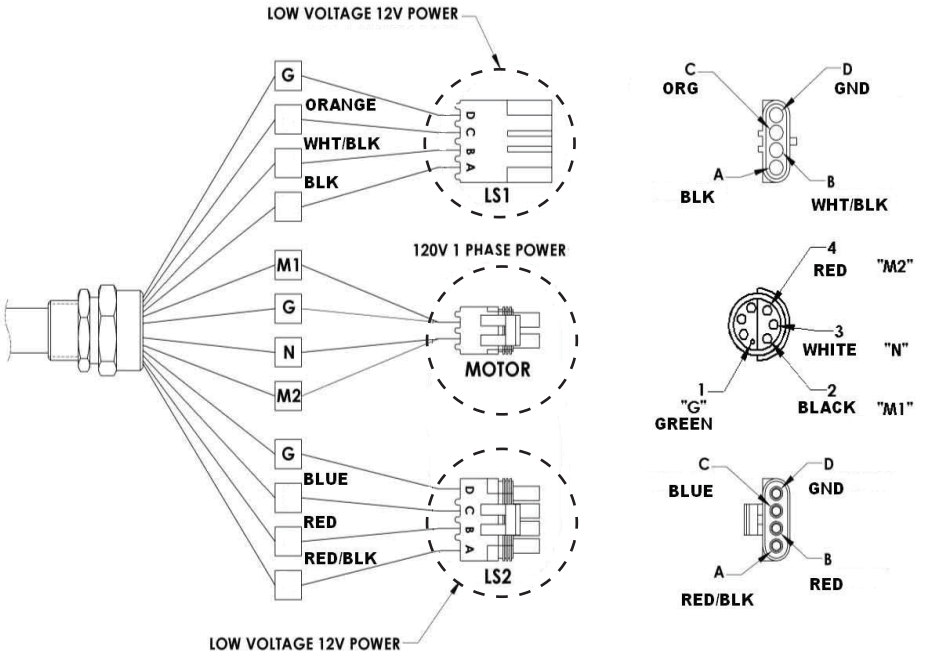
TPR - 3 LIGHT SEQUENCE OF OPERATION - SWITCHES & LIGHTS

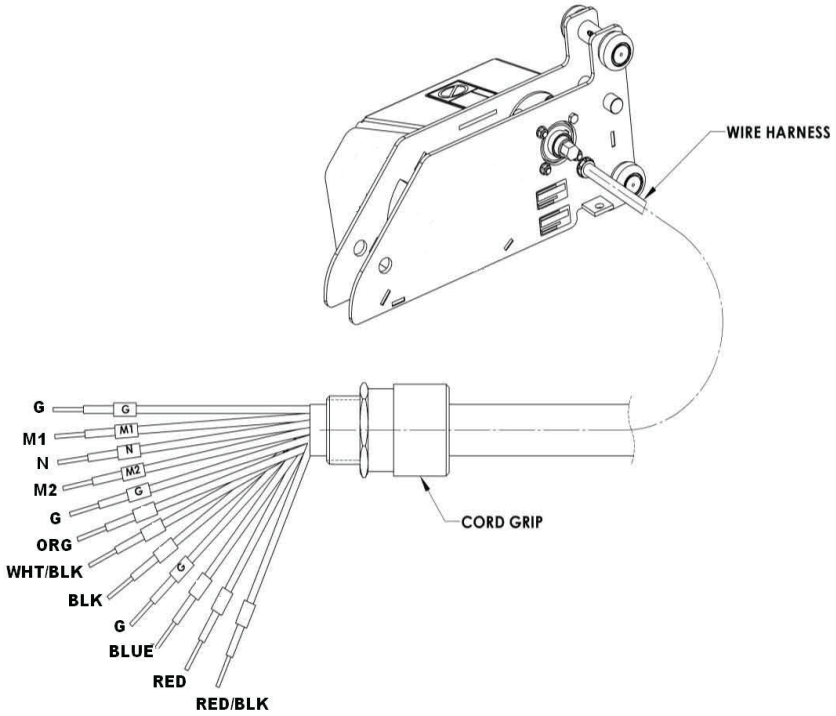
NORMAL				
Position of Restraint	Switches		Lights	
	LS1	LS2	In Light	Out Light
Fully Lowered	Activated	Not Activated	R	G
Not Fully Lowered Not In Working Zone [a]	Activated	Activated	R & A	R
In Working Zone [b]	Not Activated	Activated	G	R
Fully Raised	Activated	Activated	R & A	R

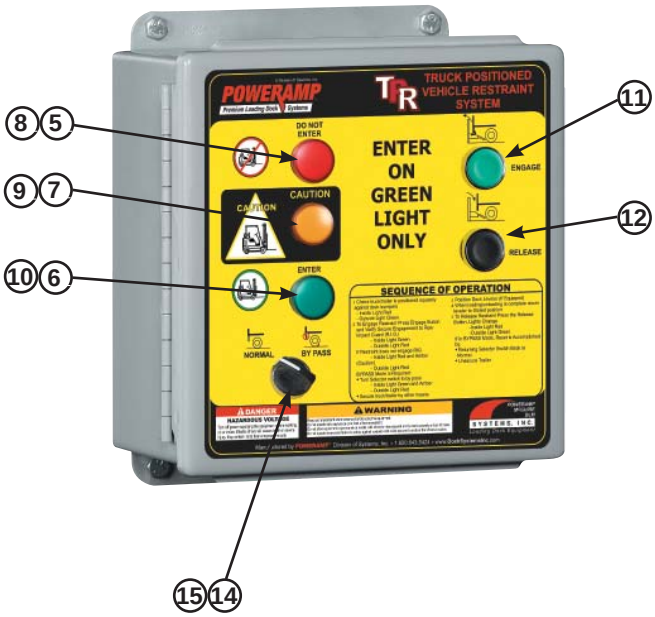
BYPASS				
Position of Restraint	Switches		Lights	
	LS1	LS2	In Light	Out Light
Fully Lowered	Activated	Not Activated	G & A	R
Not Fully Lowered Not In Working Zone [a]	Activated	Activated	G & A	R
In Working Zone [b]	Not Activated	Activated	G & A	R
Fully Raised	Activated	Activated	G & A	R

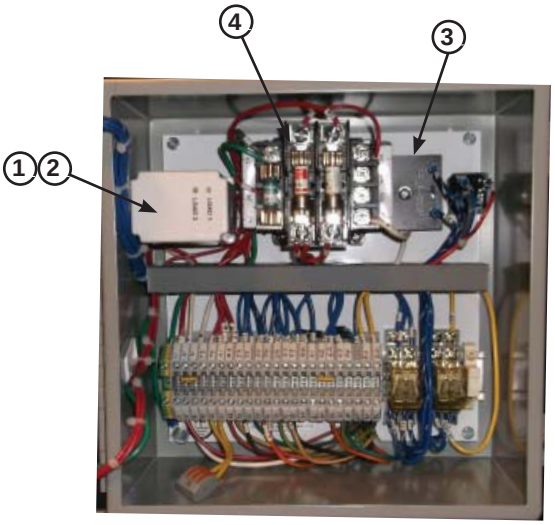
[a] Not Fully Lowered, Not at ICC Bar, and Not Fully Raised.

[b] Not Fully Lowered, Supposingly at ICC Bar, and Not Fully Raised.


LOW VOLTAGE 12V POWER
G
ORANGE
WHT/BLK
BLK
D C B A
LS1
120V 1 PHASE POWER
M1
G
N
M2
MOTOR
G
BLUE
RED
RED/BLK
D C B A
LS2
LOW VOLTAGE 12V POWER
C
ORG
D
GND
A
BLK
B
WHT/BLK
4
RED
"M2"
3
WHITE
"N"
1
"G"
GREEN
2
BLACK
"M1"
C
BLUE
D
GND
A
RED/BLK
B
RED

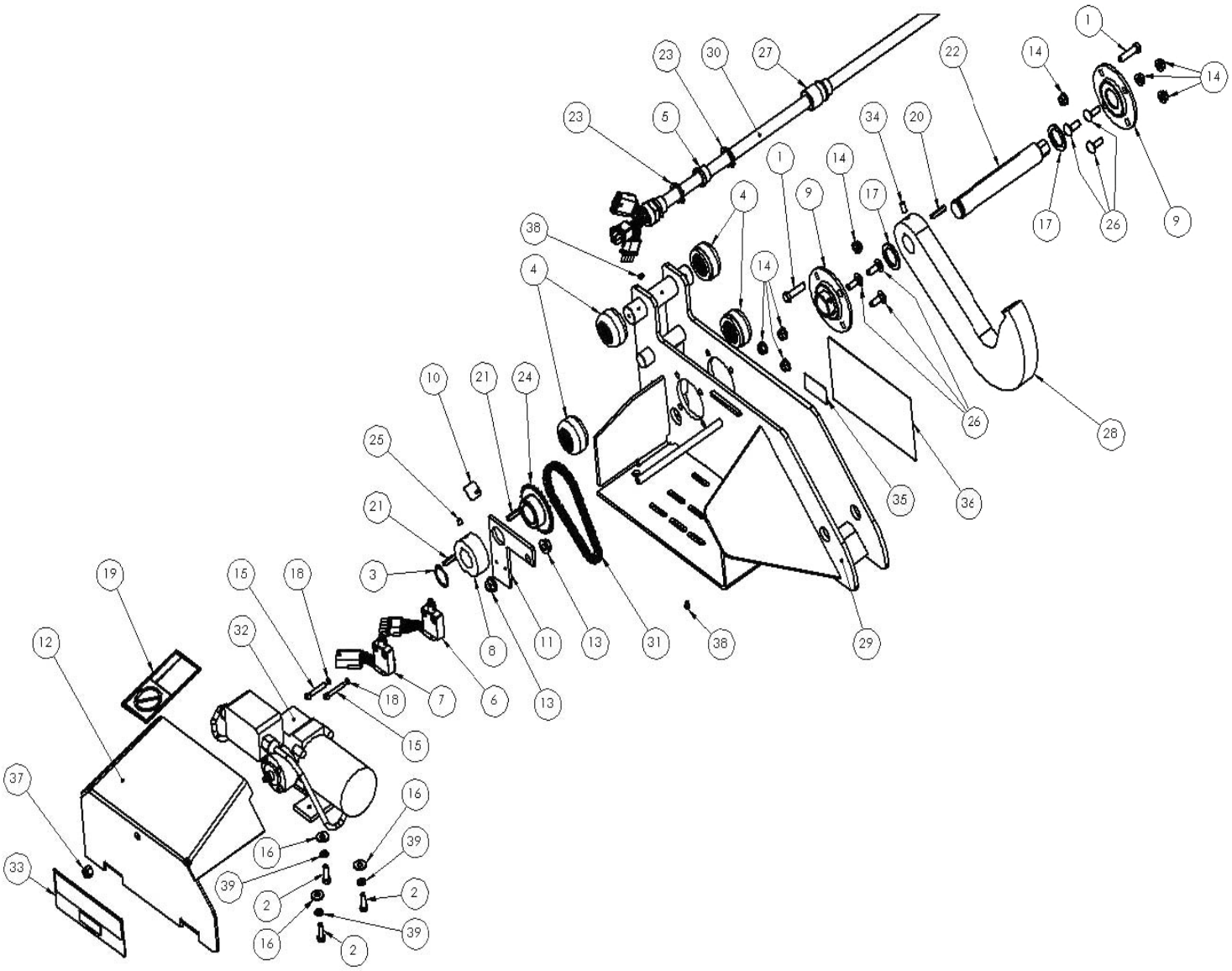

WIRE HARNESS
CORD GRIP
G
M1
N
M2
G
ORG
WHT/BLK
BLK
G
BLUE
RED
RED/BLK





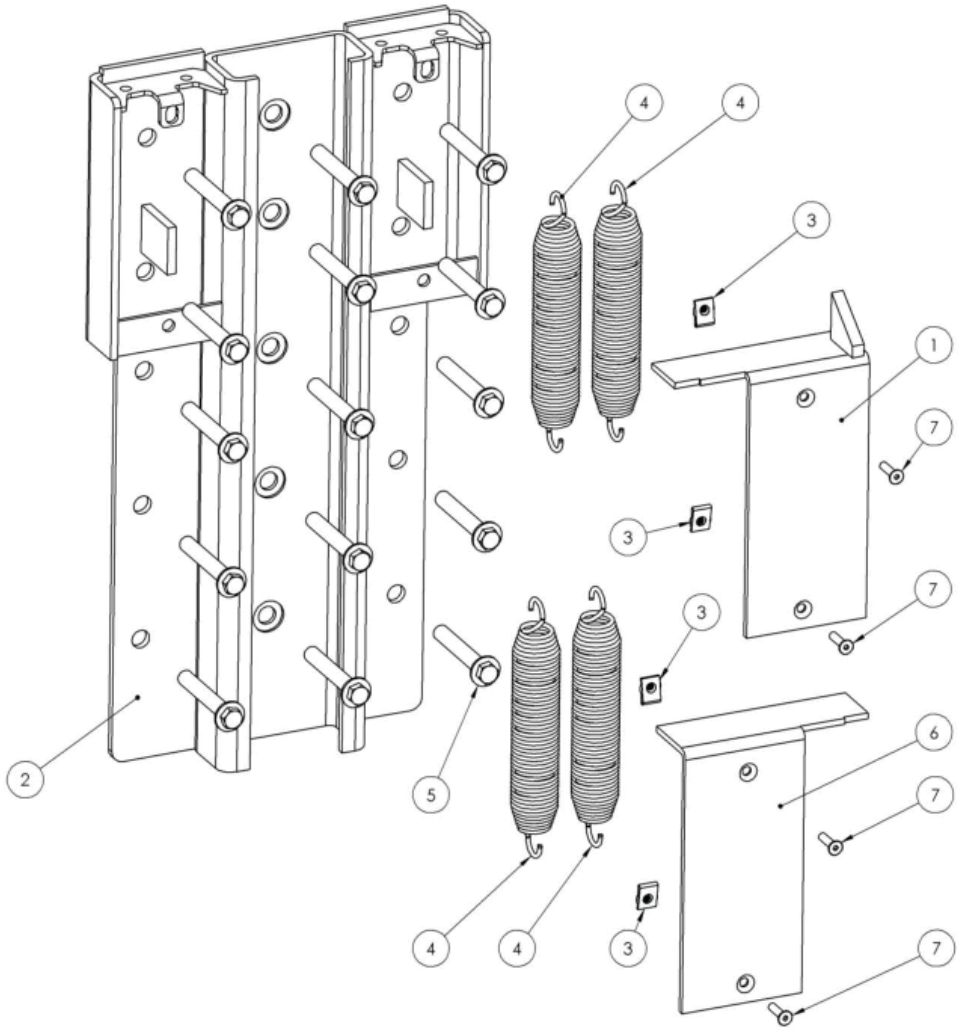
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	3051-0173	TIMER
2	1	3051-0061	TIMER SOCKET
3	1	7141-0343	FLASHER
4	1	1841-0137	TRANSFORMER (DOES NOT INCLUDE FUSES)
5	1	0961-0544	RED LED MODULE (12 VOLT)
6	1	0961-0545	GREEN LED MODULE (12 VOLT)
7	1	0961-0566	AMBER LED MODULE (12 VOLT) (OPTIONAL)
8	1	0961-0320	RED LENS
9	1	0961-0322	GREEN LENS
10	1	0961-0321	AMBER LENS (OPTIONAL)
11	1	0961-0285	ENGAGE PUSH BUTTON
12	1	0961-0280	RELEASE PUSH BUTTON
13	1	3051-0161	ALARM (OPTIONAL)
14	1	0961-0300	SELECTOR SWITCH
		0961-0305	KEY SWITCH OPTIONAL (NOT SHOWN)
15	1	0961-0145	KEY (ONLY)

PARTS

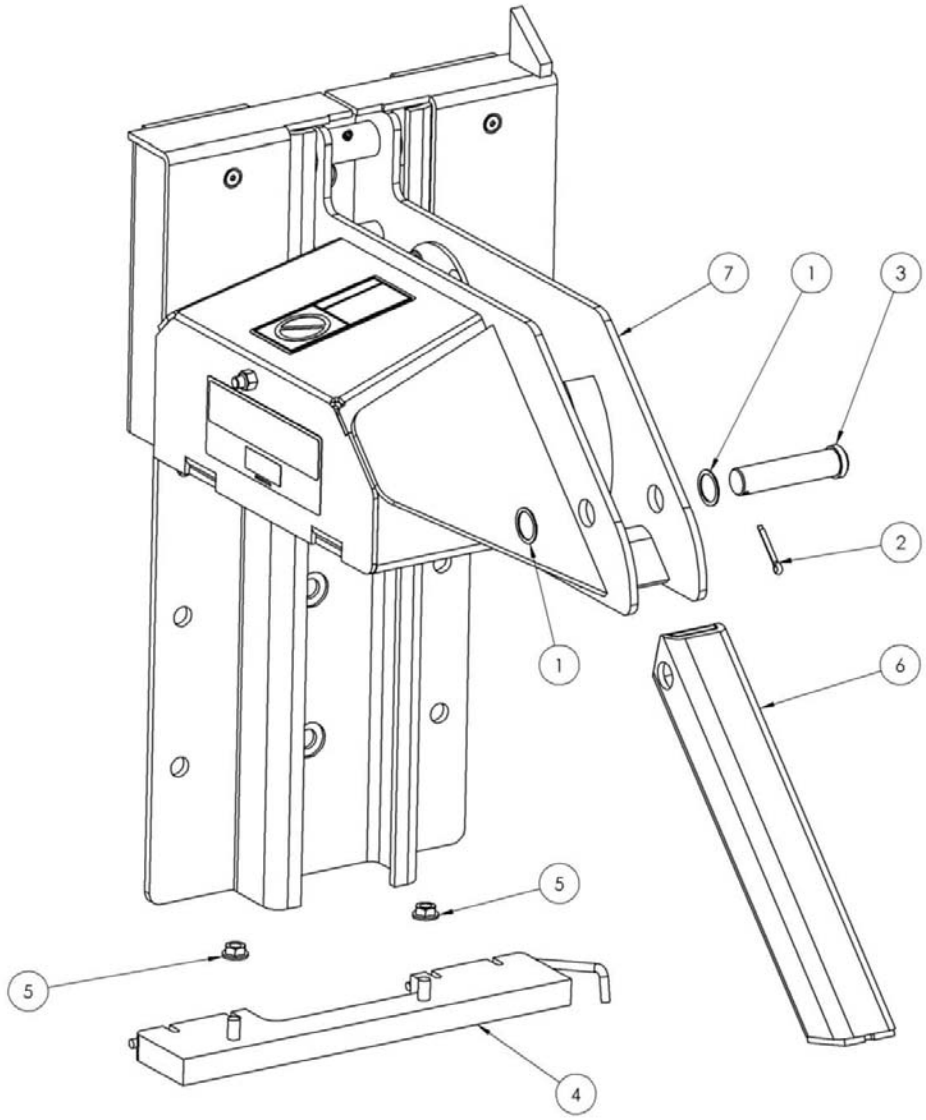


ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	2101-0126	CAP SCREW 3/8”-16 X 1-1/2” HH
2	3	2101-0011	CAP SCREW 5/16-18 X 1” HH
3	1	9701-0200	RING , SNAP
4	4	9701-0113	ROLLER ASSEMBLY
5	1	9701-0201	3/4” CONDUIT NIPPLE
6	1	0961-0570	LIMIT SWITCH, LS1
7	1	0691-0571	LIMIT SWITCH, LS2
8	1	9701-0112	CAM
9	2	9701-0111	BEARING ASSEMBLY
10	1	9701-0202	DECAL, CAM

ITEM	QTY	PART NUMBER	DESCRIPTION
11	1	9701-0109	LIMIT SWITCH MOUNTING PLATE
12	1	9701-0108	CHAIN COVER
13	2	9701-0203	LOCK NUT 7/16”-14 SERRATED FLANGE
14	8	9701-0204	WHIZ NUT 3/8”-16 SERRATED FLANGE
15	2	9701-0205	CAP SCREW 1/4”-20 X 1-1/2” SOCKET HEAD
16	3	2101-0163	WASHER FLAT 5/16”
17	2	9701-0206	BUSHING, MACHINERY 1-3/4” OD,1-1/4” ID,1/8”THICK
18	2	2101-0005	WASHER, LOCK 1/4”
19	1	1751-0149	DECAL, NO STEP
20	1	9701-0207	KEY, HOOK 1/4” X 1/4” X 1-1/4”
21	2	9701-0208	KEY, SPROCKET/CAM 1/4” X 1/4” X 1”
22	1	9701-0110	HOOK SHAFT
23	2	9701-0209	NUT,LOCK 3/4” CONDUIT
24	1	9701-0114	DRIVE SPROCKET,HOOK W/SET SCREW
25	1	9701-0210	SCREW, SET 5/16”-18 X 1/2” SK
26	6	9701-0211	BOLT, CARRIAGE 3/8”-16 X 1”
27	1	9701-0212	CORD GRIP
28	1	9701-0107	STRAIGHT HOOK
29	1	9701-0106	CARRIAGE WELDMENT
30	1	4301-0008	WIRE HARNESS
31	1	9701-0115	CHAIN
32	1	3411-0050	MOTOR ASSEMBLY
33	1	1751-0847	DECAL, PRODUCT
34	1	9701-0213	SCREW SET 5/16”-18 X 5/8”
35	1	1751-0010	DECAL, SERIAL
36	1	1751-0851	DECAL, TPR STRIPE LH
37	1	1751-0850	DECAL, TPR STRIPE RH
38	1	9701-0214	NUT, NYLOCK 7/16”-14
39	2	9701-0215	GREASE FITTING
40	3	2101-0163	WASHER, LOCK 5/16”
41	1	1751-0735	DECAL MADE IN THE USA

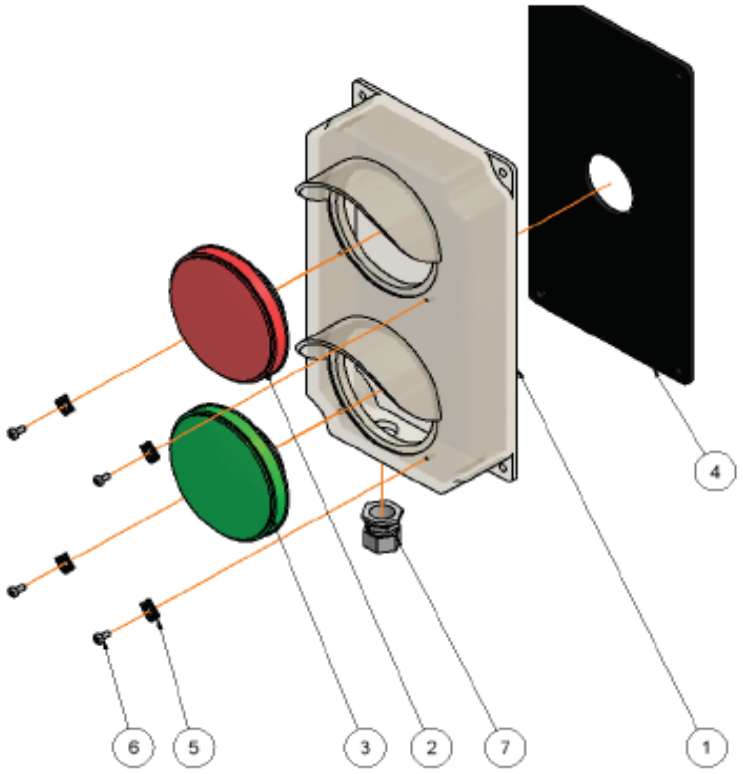


ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9701-0101	SPRING COVER RIGHT HAND
2	1	9701-0100	ROLLER TRACK
3	4	9701-0216	NUT CAGE 5/16”-18
4	4	0941-0016	EXTENSION SPRING
5	15	2101-0108	5/8” X 5” CONCRETE ANCHOR
6	1	9701-0102	LEFT SPRING COVER
7	4	2101-0069	SCREW, SOCKET 5/16”-18 1-1/4” FLAT HEAD



ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	9701-0217	WASHER, FLAT 1” X 18 GAUGE
2	1	9701-0218	PIN› COTTER
3	1	9701-0219	PIN, SLOPE EXTENSION PIVOT
4	1	9701-0105	SPRING MOUNTING PLATE ASSEMBLY
5	2	9701-0220	NUT,LOCK 7/16”-14 SERRATED FLANGE
6	1	9701-0104	SLOPE EXTENSION
7	1	9701-0103	CARRIAGE ASSEMBLY KIT (INCLUDES 1,2,3,5,6)

OSLA (Outside Light Assembly)



Item	Quantity	Part Number	Description
1	1	3055-0011	Complete Housing (Includes Items 2-7)
2	1	3051-0147	RED LED /Lens 12 volt
3	1	3051-0085	GREEN LED/ Lens 12 volt
4	1	3051-0068	Mounting Gasket
5	4	3051-0105	Clips, Lens Holding
6	4	3051-0104	Screw, Lens Holding Clip
7	1	x	Conduit Fastener, 3/4” x 3/8” (Included in Light Package)

DANGER

- Read and follow all instructions, warnings, and maintenance schedules in the manual and on placards.
- Vehicle restraint operation and servicing is restricted to authorized personnel.

1. Before using the vehicle restraint:
   - Remove any debris, snow, or ice that may obstruct vehicle restraint operation.
   - Alert personnel in the area of potential vehicle restraint operation and ensure area is clear.
   - Operate the vehicle restraint through one complete cycle inspecting it for proper operation and light sequence. Advise maintenance personnel of any damage or improper operation immediately. Remove all malfunctioning or damaged vehicle restraints from service using approved lockout/tagout procedures.
2. Before attempting to restrain a transport vehicle:
   - Verify that transport vehicle is positioned squarely against dock bumpers.
   - Inspect the transport vehicle's rear impact guard (RIG). Damaged or missing RIGs may not allow the vehicle restraint to securely capture the RIG. Wheel chocks must be used whenever the ability for the vehicle restraint to capture the RIG is in question. **(NOTE: The transport vehicle's suspension and load condition will affect trailer height.)**
3. After activating vehicle restraint:
   - Verify that the transport vehicle's RIG has been restrained successfully. In the event this cannot be determined, use wheel chocks in addition to restraint.
   - If equipped with a light communication system, load and unload on GREEN light only.
4. Maintenance or service must be performed by authorized personnel only. Follow approved lockout/tagout procedures.

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN DEATH OR OTHER SERIOUS INJURY.

Scan to view our owner's/user's manuals online.
www.**DockSystemsInc**.com

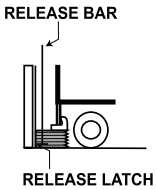
1.800.643.5424
Call for additional placards, or manuals, or with questions regarding proper use, maintenance, and repair of dock leveler.

POWERAMP MCGUIRE DLM SYSTEMS, INC.
Loading Dock Equipment

1751-0880 Rev A

OPERATING INSTRUCTIONS

VEHICLE RESTRAINTS

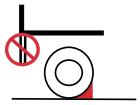


ENGAGE RESTRAINT

1. Open overhead door and visually check that transport vehicle is positioned squarely against dock bumpers and has a RIG bar. Inside light is RED and outside light is GREEN (if equipped with lights).
2. **(Powered Restraints)** Depress the ENGAGE button to activate restraint.
   (Manual Restraints) Using release bar, pull upward on release latch until restraint is released.
3. Visually inspect that RIG bar has been restrained successfully. In the event this cannot be determined, use wheel chocks in addition to restraint.
   - If RIG bar is missing or damaged, use wheel chocks to secure transport vehicle at dock.
   - Loading/unloading may proceed with caution.
4. **(Automatic Light Controls)** When RIG is secured inside light is GREEN and outside light is RED.
   (Manual Light Controls) Once RIG is secured turn switch to SERVICE TRAILER. Inside light is GREEN and outside light is RED.

RELEASE RESTRAINT

1. **(Powered Restraints)** To release restraint depress the RELEASE button. When safely stored inside light is RED and outside light is GREEN.
   (Manual Restraints) To release restraint push down on restraint arm with release bar until restraint is completely stored. **(Note: Restraint is completely stored when release latch engages restraint arm.)**
2. **(Automatic Light Controls)** When safely stored inside light is RED and outside light is GREEN.
   (Manual Light Controls) When safely stored turn switch to DO NOT SERVICE TRAILER. Lights change to RED inside and GREEN outside.



BY-PASS

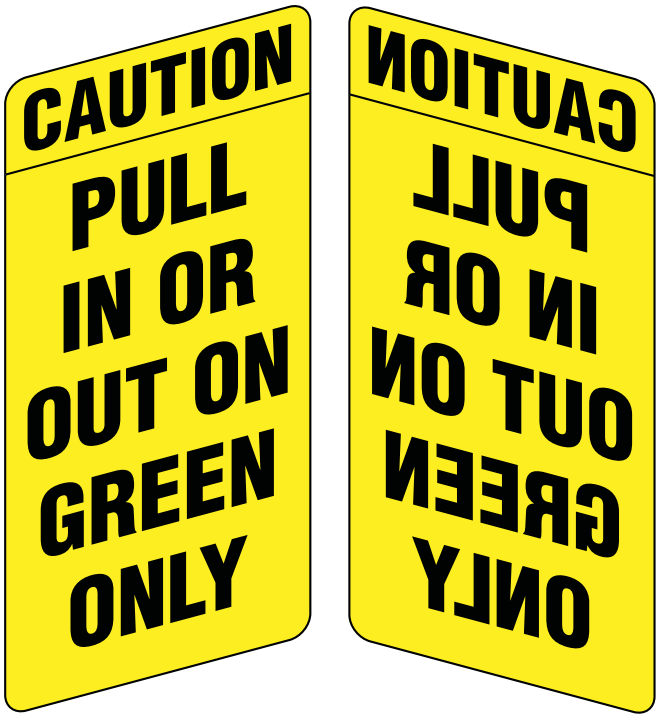
1. If restraint is unable to secure transport vehicle's RIG, use wheel chocks to secure transport vehicle at the dock.
2. Turn switch to BY-PASS. Inside light is GREEN and outside light is RED.
3. Loading/unloading may proceed with caution.

BY-PASS RESET (RETURN TO NORMAL OPERATION)

1. When loading or unloading is completed and wheel chocks are removed manual reset of BY-PASS is accomplished by turning switch to NORMAL. Lights change to RED inside and GREEN outside.

Use for PowerStop and StopTite series

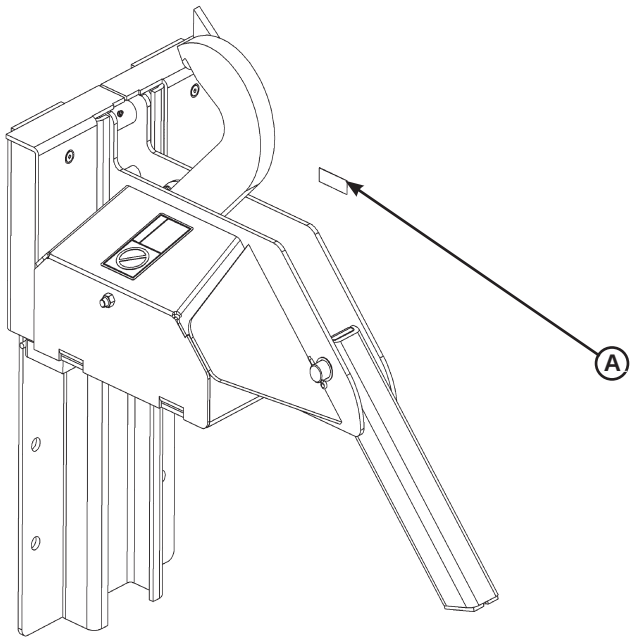
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1751-0880	TPR PLACARD



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1751-0033	OUTSIDE SIGN RIGHT READ
2	1	1751-0034	OUTSIDE SIGN MIRROR IMAGE
3	1	1751-0036	OUTSIDE SIGN ENTER ON GREEN ONLY

MISCELLANEOUS

Customer Information



The model/serial number deal (A) is located on the right side panel of the restraint.

When you receive your Poweramp product, write down the product model and serial number in the form provided. This will help ensure safe keeping of the numbers in the event the model/serial number decal (A) becomes lost or damaged.

Also, write down Systems, Inc.'s job number, the company that installed the dock leveler, and the original owner's name. This will all help to identify the specific dock leveler if more information is required.

When ordering, use part numbers and description to help identify the item ordered. Do not use "item" numbers. These are only for locating the position of the parts. Always give dock leveler MODEL NUMBER and/or SERIAL NUMBER.

For service, call or contact:

Systems, Inc.
P.O. Box 309
Germantown, WI 53022

Phone: (800) 643-5424
Fax: (262) 255-5917

Dock Leveler Information

Model _____

Serial No. _____

Systems, Inc., Job No. _____

Original Owner Information

Name _____

Address _____

_____

Installer Information

Name _____

Address _____

_____

Date of Installation _____

STANDARD PRODUCT WARRANTY

SYSTEMS, INC. warrants that its products will be free from defects in design, materials and workmanship for a period of one (1) year from the date of shipment. All claims for breach of this warranty must be made within 30 days after the defect is or can with reasonable care, be detected. In no event shall any claim be made more than 30 days after this warranty has expired. In order to be entitled to the benefits of this warranty, the product must have been properly installed, maintained and operated in accordance with all manufacturer's recommendations and/or specified design parameters and not otherwise have been subject to abuse, misuse, misapplication, acts of nature, overloading, unauthorized repair or modification, application in a corrosive environment or lack of maintenance. Periodic lubrication, adjustment and inspection in accordance with all manufacturers' recommendations are the sole responsibility of the Owner/User.

In the event of a defect, as determined by SYSTEMS INC., covered by this warranty, SYSTEMS INC. shall remedy such defect by repairing or replacing any defective equipment or parts, bearing the cost for the parts, labor and transportation. This shall be exclusive remedy for all claims whether based on contract, negligence or strict liability.

WARRANTY LIMITATIONS

THE ABOVE WARRANTIES ARE IN LIEU OF ANY OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SYSTEMS INC. AND ITS SUBSIDIARIES SHALL NOT IN ANY EVENT BE LIABLE TO ANYONE, INCLUDING THIRD PARTIES, FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND INCLUDING BUT NOT LIMITED TO, BREACH OF WARRANTY, LOSS OF USE, LOSS OF PROFIT, INTERRUPTION OF BUSINESS OR LOSS OF GOODWILL.